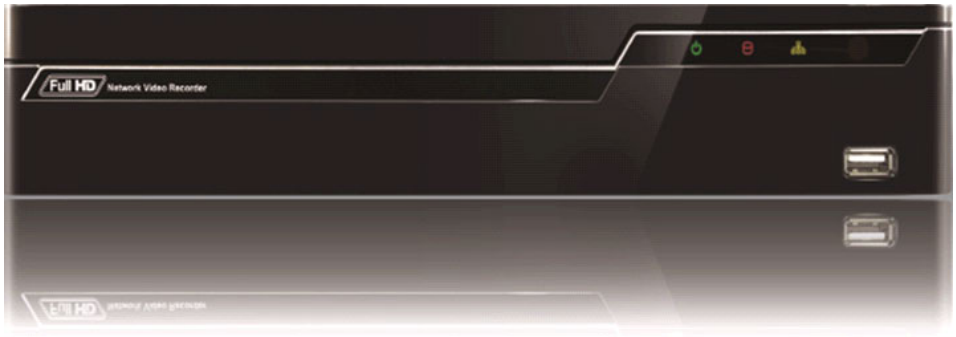
XNR44P 4 Channel NVR with PoE



Safety Information

Before You Begin

Read these instructions before installing or operating this product.
Note: This installation should be made by a qualified service person and should conform to local codes.
This manual provides installation and operation information. To use this document, you must have the following minimum qualifications:

- A basic knowledge of CCTV systems and components
- A basic knowledge of electrical wiring and low-voltage electrical connections

Intended use
Only use this product for its designated purpose; refer to the product specification and you documentation.
Customer Support
For assistance in installing, operating, maintaining and troubleshooting this product refer to this document and any other documentation provided. If you still have questions, please contact Norbain Technical Support and Sales:

Norbain SD Ltd, 210 Wharfedale Road, IQ Winnersh, Wokingham, Berkshire RG41 5TP, England.

UK +44 (0) 118 912 5000

Note: You should be at the equipment and ready with details before calling Technical Support.

Conventions Used in this Manual

Boldface or button icons highlight command entries. The following warning, CAUTION and Note statements identify potential hazards that can occur if the equipment is not handled properly:

*** Warning:**
Improper use of this equipment can cause severe bodily injury or equipment damage.

**** Caution:**
Improper use of this equipment can cause equipment damage.
Note: Notes contain important information about a product or procedure.

This apparatus is manufactured to comply with the radio interference.
A Declaration of Conformity in accordance with the following EU standards has been made. The manufacturer declares that the product supplied with this document is compliant the provisions of the EMC Directive 2004/108/EC, the CE Marking Directive 93/68 EEC and all associated amendments.
All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive: 2011/65/EU, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.

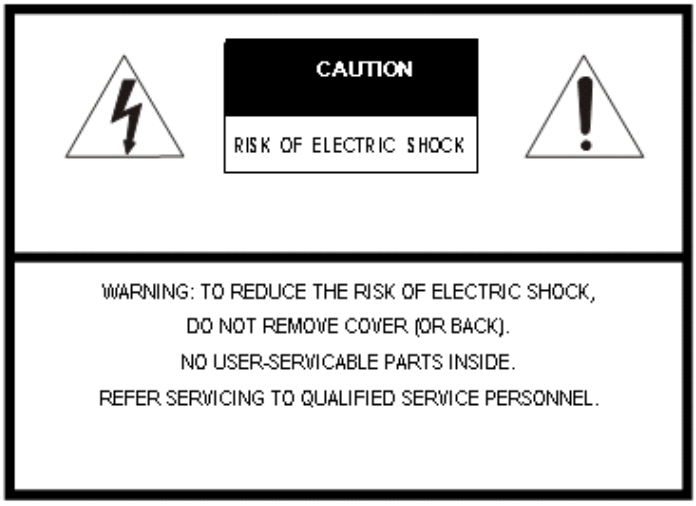
The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste.

* This symbol indicates electrical warnings and cautions.
** This symbol indicates general warnings and cautions.

NORBAIN SD LTD reserves the right to make changes to the product and specification of the product from time to time without prior notice.

WARNINGS AND CAUTIONS:

To reduce the risk of fire or electric shock, do not insert any metallic objects through the ventilation grills or other openings on the equipment.


CAUTION
RISK OF ELECTRIC SHOCK
WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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Chapter 1

XNR44P USER MANUAL

1 GETTING STARTED

1.1 Checking Supplied Items

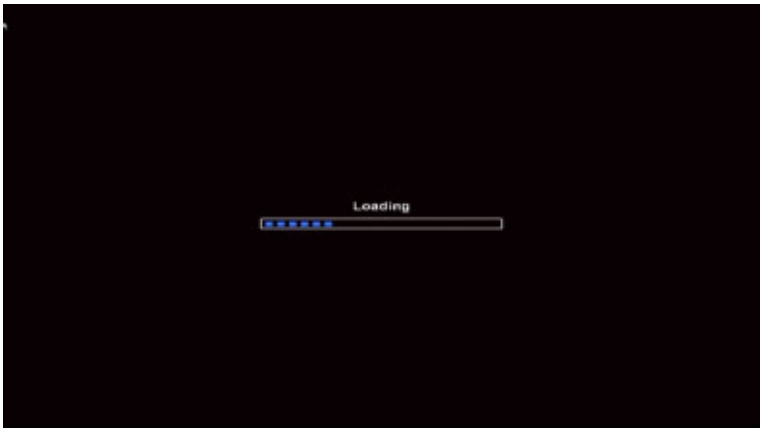
Make sure that you have the following items supplied with your NVR. If any of these items are missing or damaged, notify your vendor immediately. Keep the packing utilities for moving or storage purposes afterwards.

Items	Photo	Quantity
User Manual (NVR & Software) Quick Start Guide		1 Set 1 Set
CD (Manual & Software) Rubber Mount		1 Set 1 Set (4 Pieces)
12V 3A DC Adaptor Power Cable		1 Set
48V 1.4A PoE Adaptor Power Cable		Option
USB Mouse		1 Set

1.2 System Startup

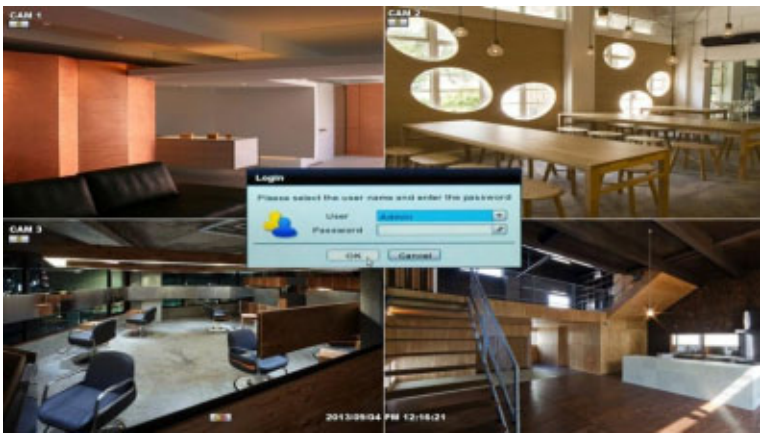
1.2.1 System Startup

After connecting peripheral devices such as cameras, monitors and a mouse to the NVR, power up the NVR by connecting DC12V 3A adaptor to the power jack on the rear panel. The boot logo will display as shown below. Please wait until the boot process completes. Optional PoE needs independent power input of 48VDC.



Login with 'User Name' at the login window which will appear as shown below.

There is only one Administrator Account configurable in the NVR system. It is assigned with an unchangeable User ID marked as 'admin'. The default password is empty (No Password). Administrator account has full access to the NVR and its configurable parameters. The Administrator Account also has the ability to create new users and to assign rights to the new user accounts. Those new users created by 'admin' account can also login with a specific password set by 'admin' account.



NOTE Do not forget the administrator's password that was set for the first time. In case the password is lost, contact your vendor.

NOTE The mouse is included. In case you need to replace it, it is highly recommended to choose well-known major brands such as DELL, MICROSOFT, LOGITECH, or SAMSUNG.

2 EXPLANATION FOR EACH FUNCTION

2.1 Front Panel

[4CH (W)280x(H)48x(D)273mm]

No.	Items	Functions
1	LED Indicator	Indicate System Status Power, Record, Network
2	USB Port	USB Port (Ver. 2.0) for Mouse Operation, Backup Device or Firmware Update

2.2 Rear Panel

[4CH (W)280x(H)48x(D)273mm]

No.	I/O	Functions
1	PoE Power	PoE Power Input (48V/1.4A)
2	Audio IN/OUT	Audio In/Out Port
3	ON/OFF	Power ON/OFF Switch
4	ALARM IN/OUT	Alarm Input/Output (1Relay output)
5	USB	Mouse Input
6	PoE	PoE Camera Input
7	Ethernet	WAN Port
8	HDMI	True HDMI Output
9	e-SATA	e-SATA
10	DC12V	Main Power Input (12V/3A)

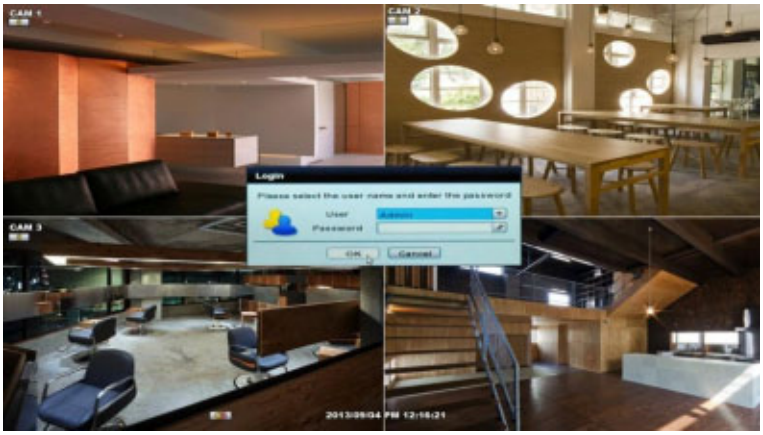
NOTE Carefully check whether the specification of the peripheral devices match the NVR's specification.

3 OPERATION

3.1 User Log-in

Check the power connection. The system can be used after power-on.

The NVR has various setting categories. The administrator can set the system password and <User> to prevent unauthorized changes to setting values and alteration of recorded file.



Enter the <Admin> or <User> password which has been set by using the virtual keyboard.

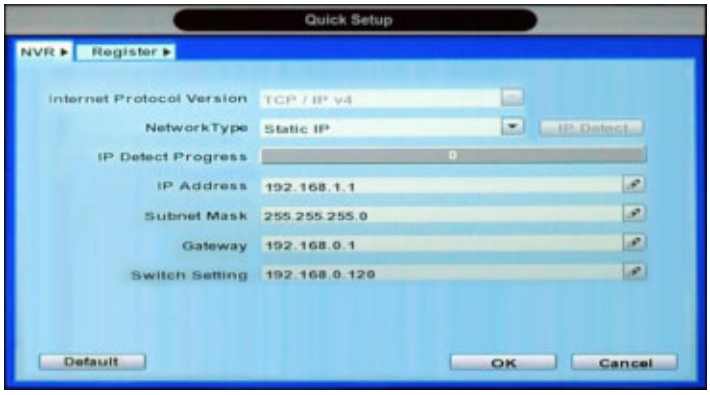
NOTE
1) <LOGIN> window will be permanently displayed in monitor as above picture until a User logs in with the right ID and password. The default User ID is 'admin' and password is none (No password).
2) If it is set as Auto Log-In, NVR does not require LOG-IN. (Please refer to 4.1.2 User.)
3) Please be sure that the PoE Adapter should be connected to the NVR after the NVR is turned on so that the IP address can be allocated properly to NVR.

Help The "HELP" button will help you understand how to setup several important settings, even without the user's manual book. For example, if you need help about how to set "Quick Setup", click "HELP" button at the right bottom of the 'Quick Setup' menu.

3.2 Quick Setup

3.2.1 NVR Setup

Quick Setup is specially designed to enable easier & faster for the major NVR settings such as NVR network setup, IP camera search & registration. When the NVR boots up and login, the Quick Setup will be operated automatically. Quick Setup pop-up is controllerable in main menu. There are two ways for connecting to network setup: DHCP or Static IP.



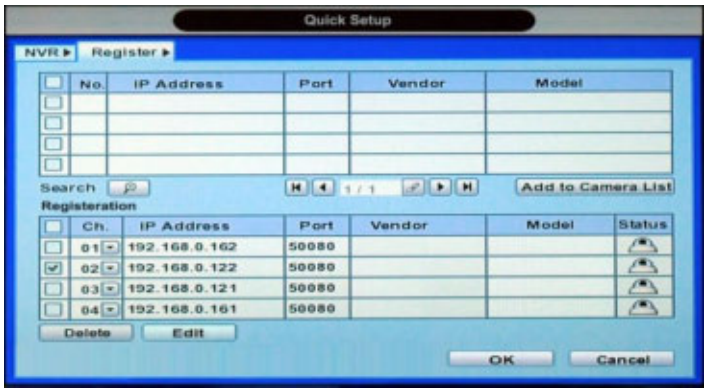
The fatory default setting is as followings:

[WAN Port]
IP Address: 192.168.1.160
Subnet Mask: 255.255.255.0
Gateway: 192.168.1.1

[Local Port: Switch Setting]
IP Address: 10.10.1.1
Subnet Mask: 255.255.255.0
Gateway: 10.10.1.1

3.2.2 IP Camera Connection

When the IP cameras are connected to the NVR, you can search the connected cameras by clicking 'Search' button. Once the cameras are discovered, check the box of each camera and click the 'Add to Camera List' button. Then the cameras will be shown in the list at the bottom. Click 'Save' button.



NOTE	In case of requiring the User ID and Password for certain IP cameras for proper registration, please click the 'Edit' button. The User ID and Password for each IP camera should be the same one which are used for web configuration page of the camera.

3.3 Live Display Mode

3.3.1 Full HD(1080p) Live Display

Full HD Live Display can be supported in live mode by using HDMI.

NOTE In playback mode, the maximum resolution is 1920*1080(main) and 640*360(secondary)

<Full HD Live & Playback Display>

3.3.2 Display

CH selection can be done by CH1, CH4 buttons and display mode can be changed by MODE button.

The live images can be displayed in 1, 4 screen mode. Whenever the left/right arrow button on the front panel, the screen will be sequentially changed.

[1 Ch]

[4 Ch]

To select channel by mouse, click target channel to display in full screen live mode. Clicking the screen again is to return to previous display mode. Pop-up menu will be displayed by clicking right mouse button to select the display mode easily.

NOTE To properly select a channel using the mouse, you need to perform a slow and clear click of the left mouse button.

3.3.3 Icons Description

The live mode display's icons or messages will be indicated on the screen to indicate the system mode or status.

Below is the icon categories that are indicated on the monitor.

Icon to be shown at Left-upper corner on each channel screen		Icon to be shown at Left-bottom corner on full screen.	
C	Continuous Recording	SEQ	Sequence display on
M	Motion Detection Recording	ZOOM	Digital zoom on
S	Sensor Activating Recording		Audio Channel
M+S	Motion Detection + Sensor Activating Recording		
C	Instant Recording (Emergency Rec)		
C+M	Continuous Recording + Motion Recording		

The sliding menu for display will be appeared when mouse cursor moves into bottom and right click of mouse enables to access a pop-up-menu.

means "Instant (emergency) recording", which is useful to urgently start recording. In emergency recording, the system follows the instant record settings. The default settings for instant record are maximum performance recording of streaming from IP camera and applied for all channels.

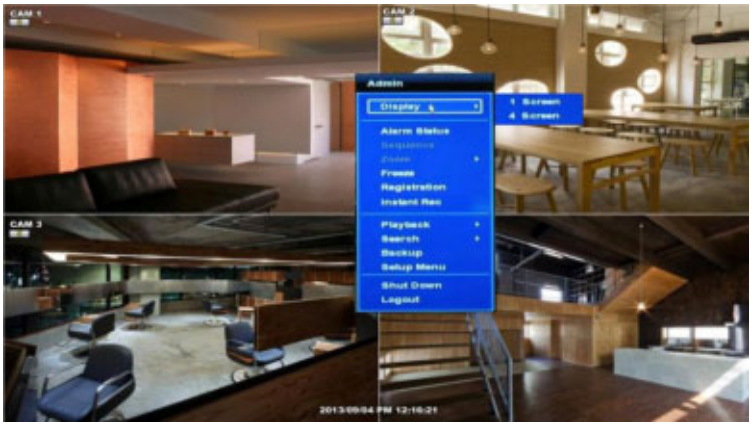
You can click the right-forwarded arrow button to automatically playback the latest video clip.

means the HDD usage percentage by video recording. If it shows 60%, then 60% of HDD space has been used up for recording.

NOTE If u cannot find any coloured-mark in the top right corner of the live screen mode, then it means that the system does not record any image. In this case, you need to check recording schedule or camera of the main setup menu.

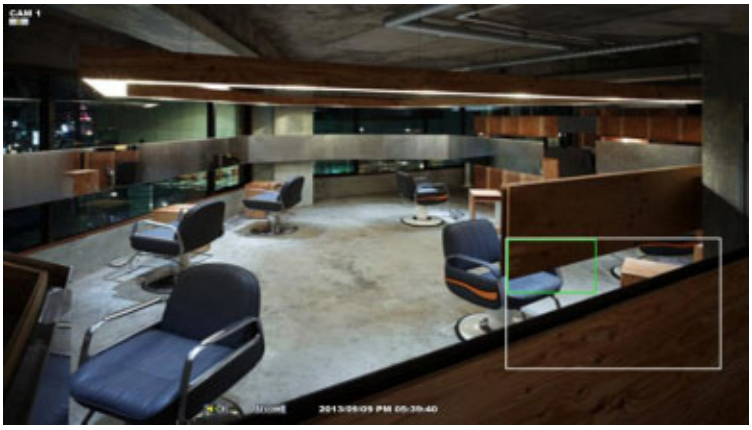
3.3.4 Pop-up Menu

You can click the right button of the mouse to pop up a sub-menu as shown below.



When “SEQUENCE” is selected,

icon is shown on the bottom left corner of the screen, and display screen will be sequentially changed.

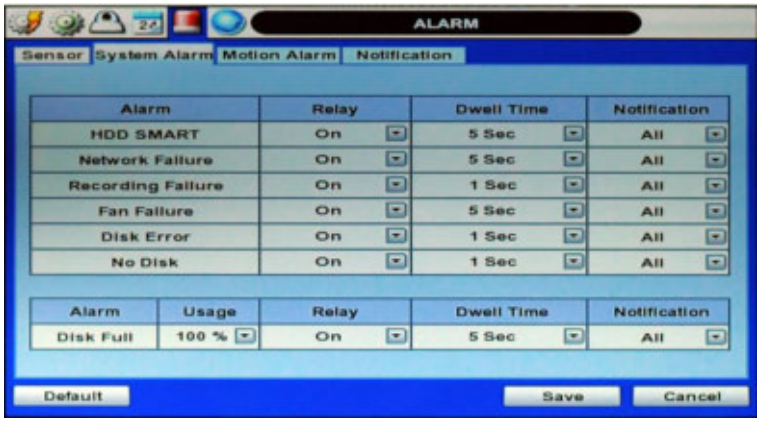


You can select the “ZOOM” on a sub-menu by clicking the right mouse button on a full screen mode. When digital zoom function is activated,

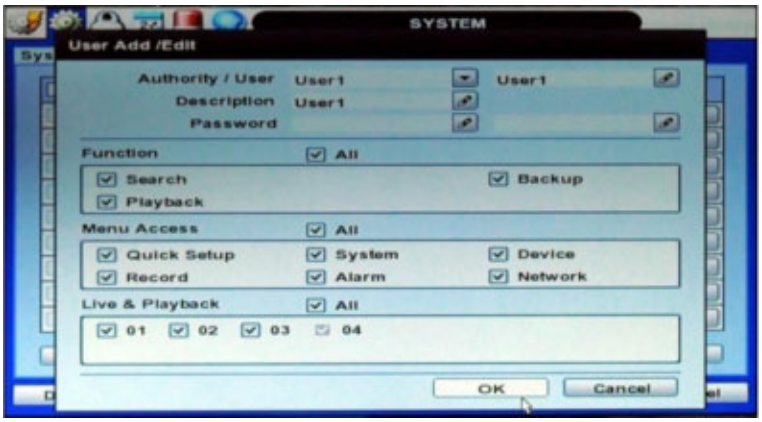
icon will be shown and zoomed area will be displayed on the bottom left corner. You can

select "Zoom-In size(x1.5, x2, x2.5 or x3)" on zoom pop-up menu. After selecting, move a yellow box by using the mouse to drag in the desired area of the camera to zoom. In order to go back to live display mode, please click "Zoom-In size" again.

When a camera is disconnected, a warning sound may be generated depending on the system settings. You can set the warning sound from 'Network Failure' section on the System Alarm of the Alarm menu.



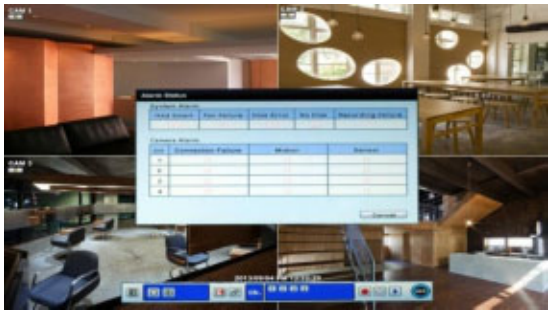
Admin level can set different level of authorization for each user. If a certain user is not allowed to view a certain live and playback channel, then no image appears on the display screen. To setup, move to System menu and click 'User'.
The 'User Add/Edit' popup page will appear like the screenshot below when admin level clicks the button 'Add' at the right bottom. If Boxes are checked, The user can have an authorization to get access to each function and section.



3.3.5 Alarm Status

Intuitively, System alarm and Camera alarm will be displayed in icons. System alarm includes HDD S.M.A.R.T, Fan failure, Disk Error and No Disk and Recording failure. Camera alarm displays network connection status, motion event and sensor event from connected cameras. However, motion and sensor from camera will only be displayed when network camera supports the motion and sensor.

[Alarm Deactivated] [Alarm Activated]



3.4 Freeze Mode

Click the right button on the mouse and select the Freeze mode while viewing a live image. In the Freeze mode, the image pauses; the date/ time information does not; and the system clock continues running. Press FREEZE to pause the live view. To resume the live view, press FREEZE again, or click the right button on the mouse and select the FREEZE again.

3.5 Registration

When you want to change the camera source, registration menu enables to search and to register connected network cameras easily. Click the right button on the mouse and select 'Registration' to move.

3.6 Instant Record

In the case of emergency, you can enable Instant Record. Click the right button on the mouse and select ‘Instant Record’ and the icon will be appeared and changed to Red ( )

After clicking ‘Instant Rec’, the icon will be changed as picture below. Click ‘Instant Rec’ once again to escape.

3.7 Playback of Recorded Video

It is easy to use the USB mouse to playback recording files. The recorded files can be seen backwards or forwards. Press the rewind and fast-forward buttons, and the playback speed can be controlled in steps of 2, 4, 8, 16, 32 times, real time when playing backwards( ) or forwards( ).

You can also play 'Frame by Frame' by clicking the button or and 'Backward' is only available for playing 'I-frame by frames per second(FPS)'.

You can click playback button to automatically play the latest video clip. It can be performed by pop-up menu.

The picture below shows the system playing back a video.

In playback screen, you can make various playback modes, such as an instant manual backup (archive), go to calendar search mode, change channel, and change screen modes. By clicking the left mouse button in the colored-time bar, you can jump to a different time in the recording. In addition, you can move the vertical search bar and release by dragging it back and forth to search the desired time in detail.

3.8 Simultaneous Live and Playback (CAMEO)

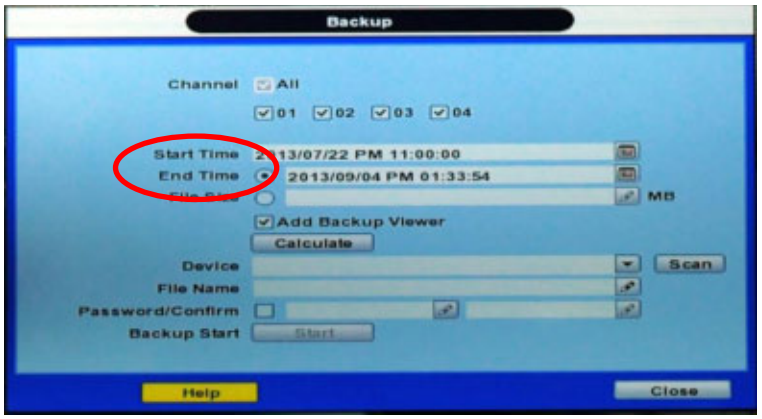
1Channel playback can be displayed in live view mode simultaneously, so called ‘Cameo’ function. In live view mode, mouse-right click on the channel that is desired to playback and then select Cameo to activate this function.

You will see the blue frame on the CH1 screen when Cameo function is activated as shown below.

3.9 Quick Backup during Live & Playback

You can easily archive video while viewing the video during live and playback mode.

In live & playback mode, you can press right click of mouse and Backup menu will appear immediately. When desired back period is decided, set the start time and end time with target channels. When USB stick is scanned to save, file name is needed to be input. The password and backup viewer can be included if required.

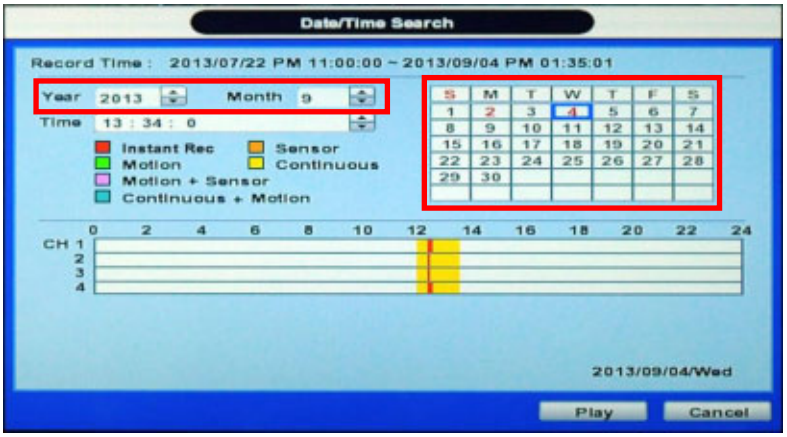


3.10 Search Recording Image

3.10.1 Date/Time Search

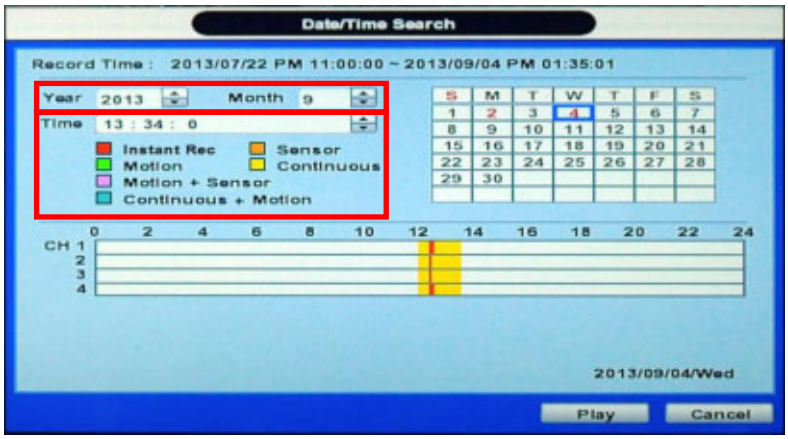
The user can select the date and time to search for a certain file within the recorded video.

In the calendar, dates in RED means that there is recorded video data. Click a desired date in Red. Then, the recorded data for the selected date will be shown.



Once the recorded video data of the selected date is shown, you can adjust the vertical search line to the time that you want to search by dragging a mouse. As the vertical line is moving back and forth, you will see “the Search time” clock is also changing. When the correct time is chosen, click Play to see the selected video data.

The colors of the time bar are different, depending on the recording mode.



No color - NONE
"NONE" means no recording by setup of schedule and recording.

Red color - Instant recording
In continuous recording mode, the system records all the time as set by "CAMERA".

Yellow color - Continuous recording

Green color - Motion-detection recording
In this mode, the system records only when motion is detected
In addition, users can set motion-recording configuration that can be set in camera menu and/or network camera menu setting.

Orange color - Sensor-activated recording
In sensor mode, the system will record when a sensor is triggered during the dwell time as set in "SENSOR" of the "ALARM" menu. Sensor input can be selected between camera input sensor and NVR input sensor. NVR input sensor is direct alarm input to NVR physically but Camera input sensor is triggered by network. You should verify if specific network camera is integrated with NVR to manufacturer.

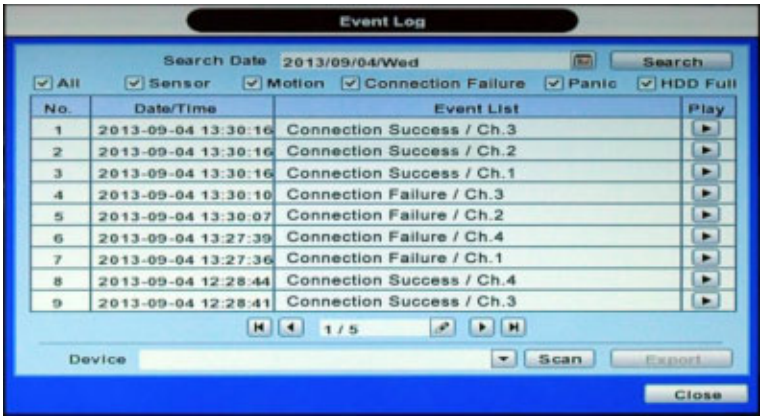
Pink color - Motion detection + Sensor-activated recording
The system does not record without motion and sensor event. Motion event data comes from network camera can be set in "Camera" in "DEVICE" menu. This menu is for integrated network camera setting and sensor type need to concluded in "Sensor" in "ALARM" menu.
If you set "OFF" in both "MOTION" and "SENSOR" in the "DEVICE" menu, then the system will neither record nor notify the Advanced Client Software or Central Management System.

Light Blue color - Continuous + Motion recording
In this mode, the system records as continuous recording mode when no motion is detected. However, if only motion is detected, system starts recording as motion recording mode.
When continuous recording mode, the system records in 1frame per second and when motion recording mode and the system will follow the camera setting value which you can set in record setup menu.
*Record Setup is available only for approved camera models.

3.10.2 Event Log

The Event log search is used to find particular event, quickly and easily. Click the right button on the mouse as shown below and select the 'Event Log' to move. Click play icon to play back the selected event data. You can copy this event list to a USB memory device in text file format.

Once a USB memory stick is inserted into the USB port, then press "SCAN" button to detect the USB stick and then press "EXPORT" to copy the log information to the media.



To sort particular events, you can select event type with time & date by a mouse or remote controller.

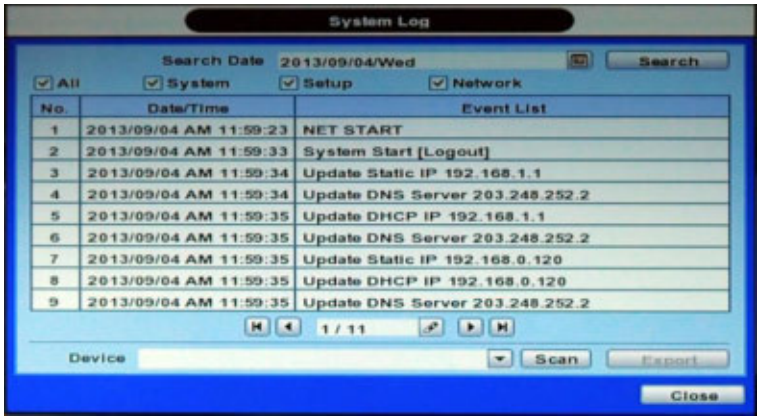
The following are the categories indicated on the Event Viewer.

1. Alarm by Sensor
2. Alarm by Motion
3. Alarm by Connection Failure
4. Alarm by Instant Record
5. Alarm by HDD Full

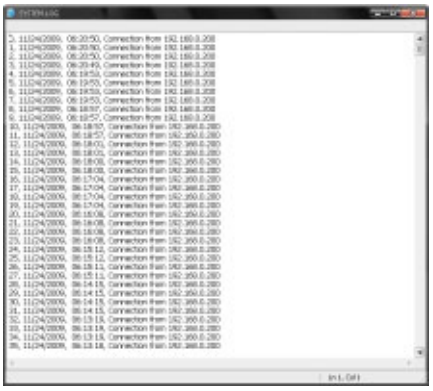
NOTE If the Alarm does not activate even though the alarm input setting has been made, check the alarm connection of the NVR rear panel and Network camera alarm.

3.10.3 System Log

The system log search can be used to find particular system log information, quickly and easily. You can copy this event list to USB memory device in text file format. Click the right button on the mouse as shown below and select the 'System Log' to move.


System Log
Search Date 2013/09/04/Wed
Search
All
System
Setup
Network
No. Date/Time Event List
1 2013/09/04 AM 11:59:23 NET START
2 2013/09/04 AM 11:59:33 System Start [Logout]
3 2013/09/04 AM 11:59:34 Update Static IP 192.168.1.1
4 2013/09/04 AM 11:59:34 Update DNS Server 203.248.252.2
5 2013/09/04 AM 11:59:35 Update DHCP IP 192.168.1.1
6 2013/09/04 AM 11:59:35 Update DNS Server 203.248.252.2
7 2013/09/04 AM 11:59:35 Update Static IP 192.168.0.120
8 2013/09/04 AM 11:59:35 Update DHCP IP 192.168.0.120
9 2013/09/04 AM 11:59:35 Update DNS Server 203.248.252.2
1 / 11
Device
Scan
Export
Close

Once export is completed, you will find a date folder created in USB thumb drive. There is "system.log" file stored in the date folder.

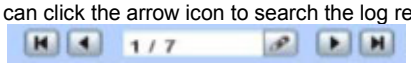


The following are the categories indicated on the system log viewer.

1. Log by system
2. Log by setup

3. Log by network

NOTE 20 numbers of log record will be shown on one page of the <System Log> and <Event Log> window. You can click the arrow icon to search the log records on another page.



3.10.4 First Data

Go to the first screen of the recorded video. This is the oldest video recorded.

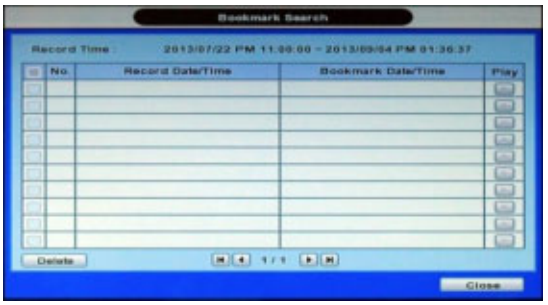
3.10.5 Last Data

Go to the last screen of the recorded video. This is the latest video recorded.

3.10.6 Bookmark

Go to the bookmark list to search the recorded video data in the bookmark list. You can make their own bookmark list very simply by click

button, during playback. When you do bookmark search, you can easily playback the bookmarked video data by clicking button, right next to each list. The bookmark will be available up to 32 times.

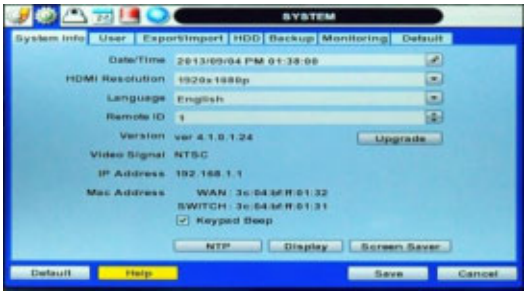


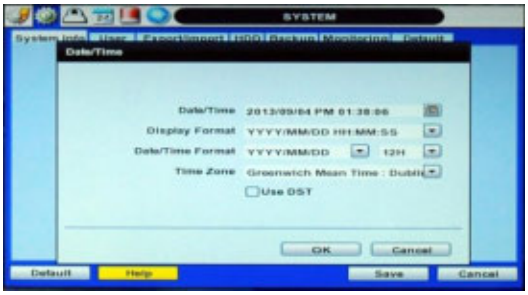
3.11 DST Setting and Screen Saver

DST starts at 2:00 local time on 2nd Sunday of March, and ends at 2:00 DST on 1st Sunday of November.

During DST (Daylight Saving Time) period, NVR time clock has to be adjusted according to regional time zone. That is, the NVR time clock will be shifted by one hour after the DST settings start, and the NVR will restore the time clock back to normal after DST finishes.

To make DST setting on the NVR, go to the menu: SYSTEM > SYSTEM INFO and click "DATE/TIME" to get the DST setting window as shown below. You can setup DST "Begin & End" time after checking "USE DST" box.





Since the clock jumps from 2:00 to 3:00, when you go to search mode, you can clearly see there is no data in all channels for one hour due to DST.

DST ends at 2:00 DST, and the clock jumps backward to 1:00 standard time on 1st Sunday of November.

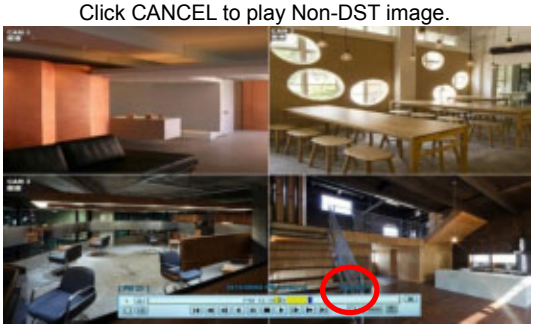
When DST finishes, there is an hour of overlapped video. The overlapped time video will be indicated in a blue color in the Intelli-Search Bar during playback mode.

When you click on such overlapped period, a message titled “Recorded video Selection” will pop up. Then you can then select whether to play DST data or Non-DST data.

Click OK to play DST image.

[“DST” image is displayed on screen]

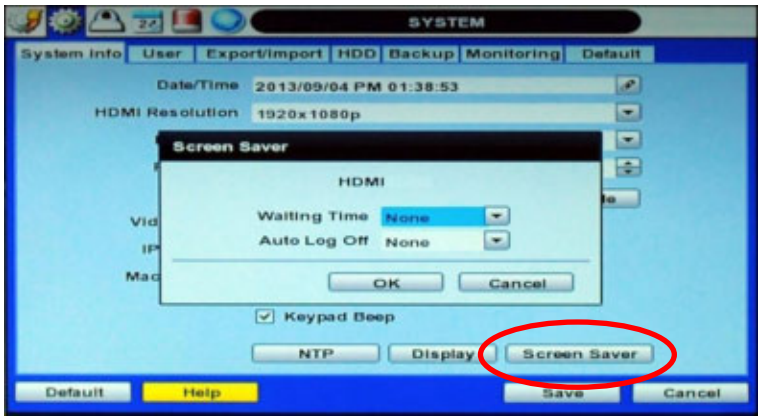
Click CANCEL to play Non-DST image.



[“Non-DST” image is displayed on screen]

To make SCREEN SAVER setting on the NVR, go to the menu setup: SYSTEM > SYSTEM INFO and click “SCREEN SAVER” to get the SCREEN SAVER setting window as shown below. You can select CRT and/or VGA by checking the boxes. You can set the WAITING TIME for when the monitor will automatically turn off.

You can turn on the selected monitor by clicking a mouse, pressing any frontal key buttons, or pressing any buttons on the remote controller.



NOTE WAITING TIME: You can select the WAITING TIME from NONE, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, and up to 60 MIN. The SCREEN SAVER will not work when either WAITING TIME is set to “NONE” or both SPOT and VGA checkbox are unchecked. SCREEN SAVER may not work, during system upgrade, HDD format, or data backup process. The system continues to record while the monitor is turned off.
When it comes to the “AUTO LOGOFF” setting, please refer to the USER setting.

4 SETTING

General setting structure consists of "Quick Setup", "System", "Device", "Record", "Alarm," and 'Network" as shown below.

<QUICK SETUP>

<SYSTEM>

<DEVICE>

<RECORD>

<ALARM>

<NETWORK >

Main MENU	Sub MENU
QUICK SETUP	NVR
	REGISTER
SYSTEM	SYSTEM INFO
	USER
	EXPORT/IMPORT
	HDD
	BACKUP
	MONITORING
	FACTORY DEFAULT
DEVICE	REGISTER
	CAMERA
	AUDIO
RECORD	SCHEDULE
	RECORD SETUP
	HOLIDAY
ALARM	SENSOR
	SYSTEM ALARM
	MOTION ALARM
	NOTIFICATION
NETWORK	NETWORK
	DDNS
	IP FILTER

4.1 System

The system menu button is selected by clicking the right mouse button.

The sub-menu window will be displayed and you can choose specific menu by selection of sub-menu to set up and/or edit.

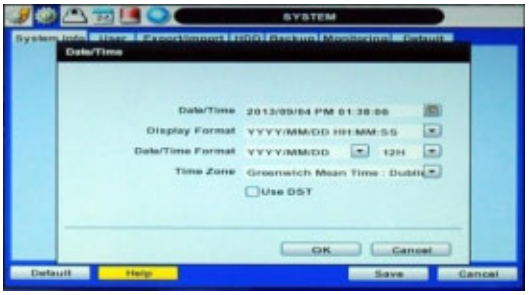
4.1.1 System Info

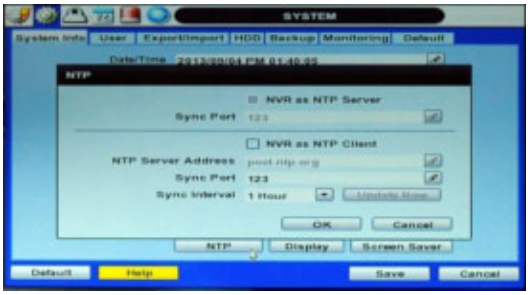
Use this sub-menu to check system information status or to change the system-related configuration.

You can then move to other sub-menu of the System; System Info, User, Export/Import, HDD, backup, monitoring and Factory Default by moving mouse pointer or pressing the arrow buttons on the front panel.

Mac address is an unique network identification number for each system.

In "DATE/TIME SET," you can activate DST (Daylight Saving Time). Select the time synchronization server and other basic settings like time zone/time format.





NOTE There are two types of TIME SYNC MODE.

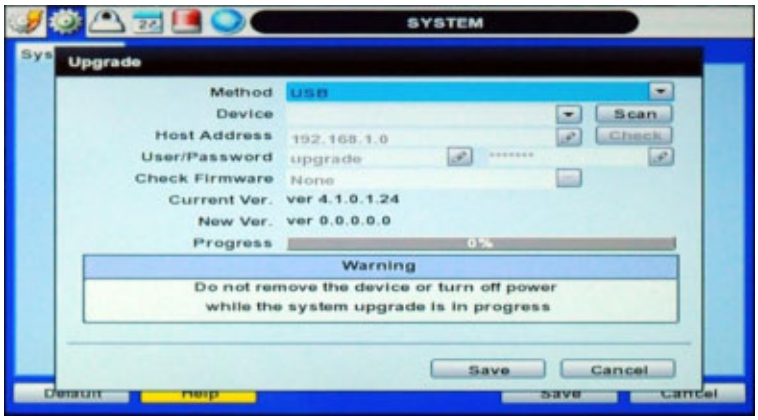
1) NVR as NTP Sever mode

The operating NVR is set as a Time Sync Server, which can synchronize the time clock of another NVR(s) connected over the same network environment.

2) NVR as NTP Client Mode

The operating NVR is set as one of the client NVR(s). Input the IP No of designated NVR, Advanced Client Software (ACS), or Central Management System (CMS), as a Time Sync Server in "SYNC SERVER"; and then its time clock is synchronized with Time Sync Server by the setup time in "SYNC CYCLE".

Upgrade: You can easily upgrade the system in "Upgrade" menu via USB/FTP server, upon the selection as shown below:

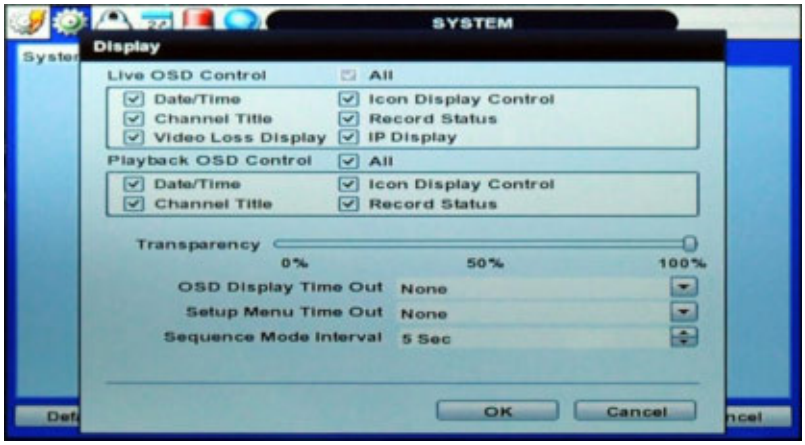


PROCEDURE	**How to upgrade system firmware by using USB memory stick** 1) Insert the USB thumb-drive formatted by FAT32 in any USB port of NVR (compatible with USB 2.0) 2) Once the system detects the thumb-drive, you can see its brand or model name in the "DEVICE" field after pressing the "SCAN" button. 3) Click "OK" to confirm. **How to upgrade system firmware by using FTP server** 1) Select FTP in the drop-down list and type a given IP address in the Host Address (FTP server IP address) field. User name and password is "none" (Default). *The FTP server address is subject to change without a prior notice. 2) Click 'Check' button then NVR will detect the latest Firmware version from the FTP server. If there is a new firmware, NVR will ask you whether you want to upgrade it or not. 3) Click 'OK' to confirm it and then click 'START' to start upgrading.

CAUTION	It is recommended to format the HDD after finishing the firmware upgrade because the data recorded by previous firmware may cause malfunction of NVR due to different format. It is possible to send the system firmware back to factory default. This may be useful if functionality takes a step backwards after a system upgrade. It is highly recommended to check all functions and menus after a firmware upgrade for proper layout and performance.

In "Display Setting", you can set OSD information display in Live & Playback mode and Dwell time of set-up display, OSD and Sequence.

Transparency is the transparency level of the menu screen. 0% means no transparency at all.



NOTE	NVRs support the following video resolutions: 640x360, 1280x720, 1280x1024, 1920x1080 You must set the proper resolution according to the monitor resolution. Default HDMI resolution is set to 1024x768. Depending on the resolution of monitor, it is recommended to change resolution to 1920x1080.

4.1.2 User

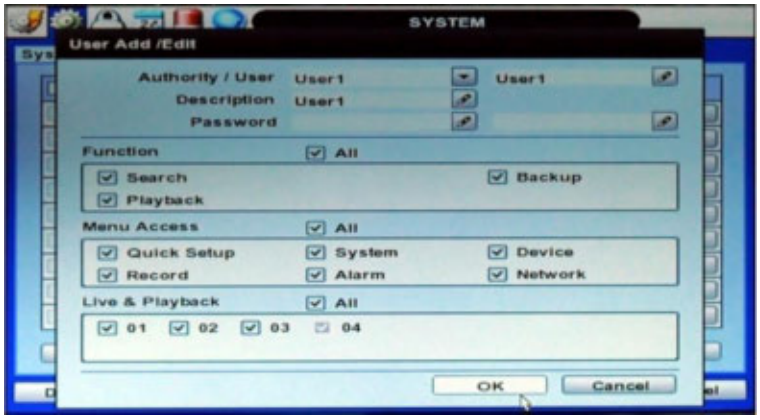
Master User of this system is always Admin with factory default of No password.

Admin must change the password of the NVR for extra security.

Admin can designate a new User with different permission levels by functions, menu access and live & playback.

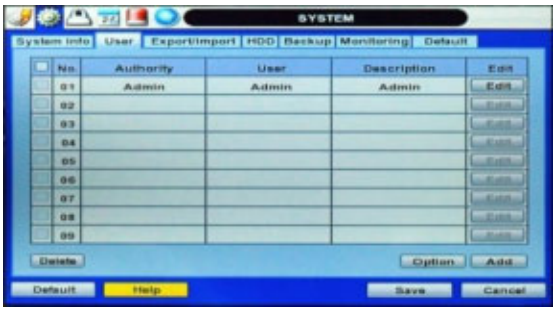
"Function" is to authorize the User to control certain functions, like search, backup and playback.

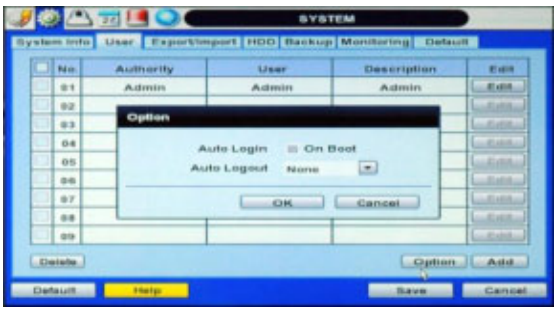
"Menu Access" is to authorize the User to access certain menu settings, like system, camera, record, network, alarm and quick setup. "Live & Playback" is to restrict a User to see both live display and a playback video for a certain camera channel.



NOTE Total number of Users including administrator is 9.

You can change the setting, so the NVR does not require login or lock the NVR control. Click 'Option' button at the right bottom, then the 'Option' popup window appears.



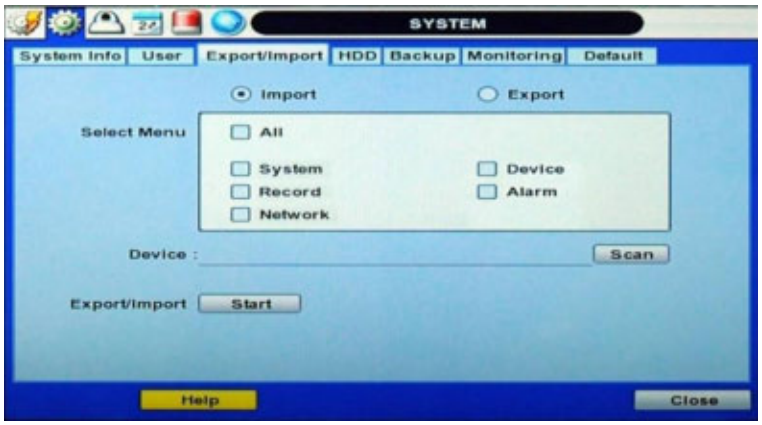


If you select "On Boot" on the popup page, the NVR will not ask for an ID and Password input again even though the system reboots.

If you select Auto Log-off and sets the time, the NVR will automatically go to the live display mode that occurs after the set time. Then, the NVR will ask for an ID and Password input when you want to control the NVR.

4.1.3 Export/Import

You can copy and paste the system configuration values in this menu. “Export” allows you to copy the settings for this system to USB memory devices. “Import” allows the you to recall the settings saved from other systems using USB memory devices. During import process, make sure that the firmware version of source NVR is the same as the destination NVR.



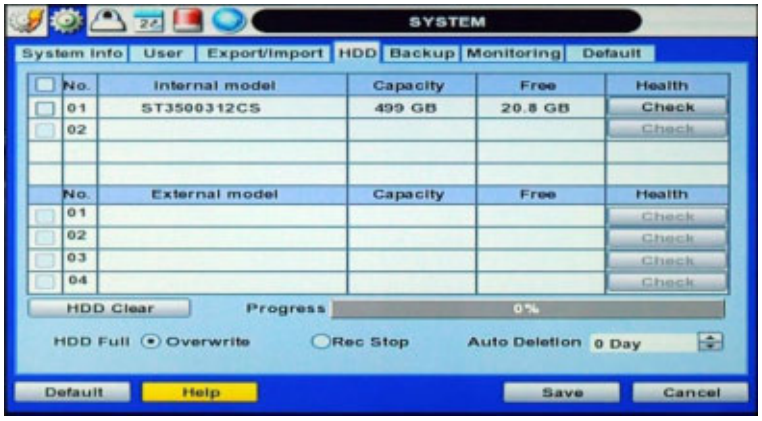
4.1.4 HDD

Internal HDD information and External HDD information is displayed. External HDD information display is possible in approved e-SATA storage.

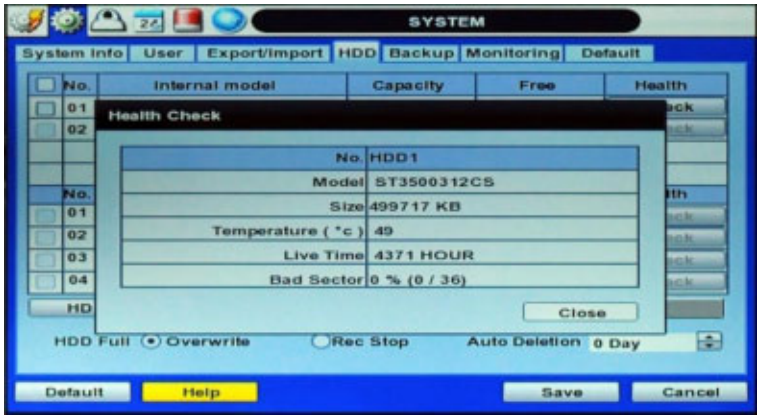
You can select “Overwrite” or “Rec Stop” when the HDD is full.

You can format a new HDD or an existing HDD for each drive. In order to format a HDD, check the checkbox and then click “HDD Clear” button in the HDD menu.

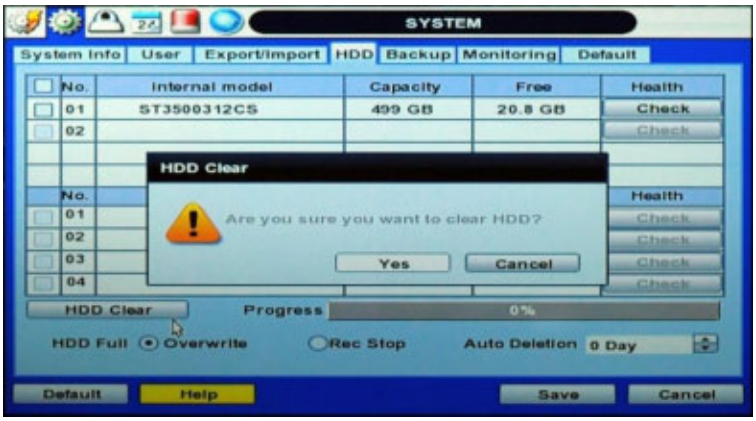
The maximum number of built-in HDD units varies across NVR models.



On the NVR system, NVR Health Check is represented in % sign as shown below. It indicates the lifetime and the temperature in Celsius of the hard disk drive.



If system resources are occupied with task, such as making a network connection or performing video playback during the format process, the format may fail. If the format fails, reboot the system resources and then try to format again.

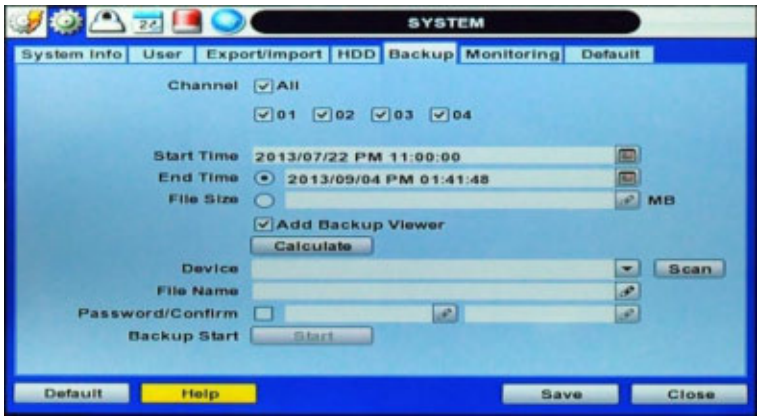


NOTE 1) Formatting may take around 40 sec for 320GB, 1 minutes for 500GB, or 7 minutes for 2TB.
2) The system always reserves a maximum of 20GB of space in each built-in HDD to utilize the memory for archiving effectively.

4.1.5 Backup

You can archive a video clip recorded for a certain period on a selected channel or channels as shown below.

Connect an appropriate USB memory device, like USB thumb drive, USB HDD and press the “SCAN” button to get the system to recognize it before archiving. Necessary file size will be shown before burning.



NOTE	Backup device shall be a well-known major brand of USB thumb drives formatted by FAT/FAT32 for proper backup.

NOTE	You can easily backup video in “Quick Backup” during video playback.

NOTE	You can click the “Calculate” button to learn the backup file size before executing backup.

NOTE	You can rename the backup file name before starting backup process and also put a password in the backup file for security purpose. In order to playback the file, you should input the password.

- **Backup Video Player**

There will be a single file after archiving, if "Auto Player" was selected.

You can double click "Player.exe" file to open the video data file (PSF format) in the folder.

You can print out, capture a still image, zoom out, or make an ASF file format, by using the icons located on top of the player window.

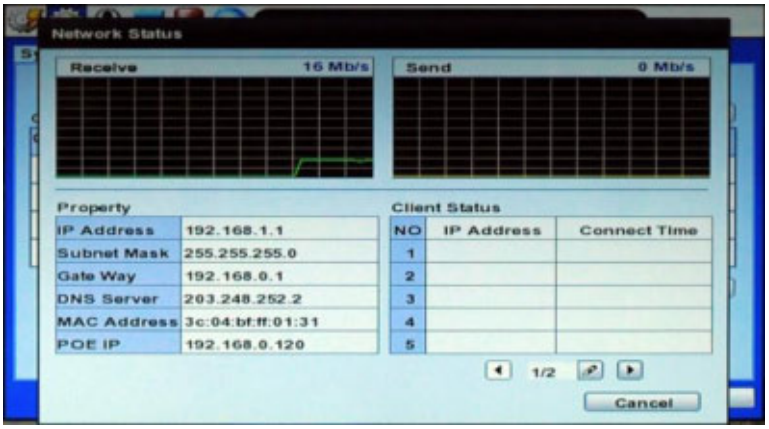
NOTE You also can play the backup-video clips by Advanced Client Software and Central Management System.

4.1.6 Monitoring

Monitoring menu enables you to see the status information.

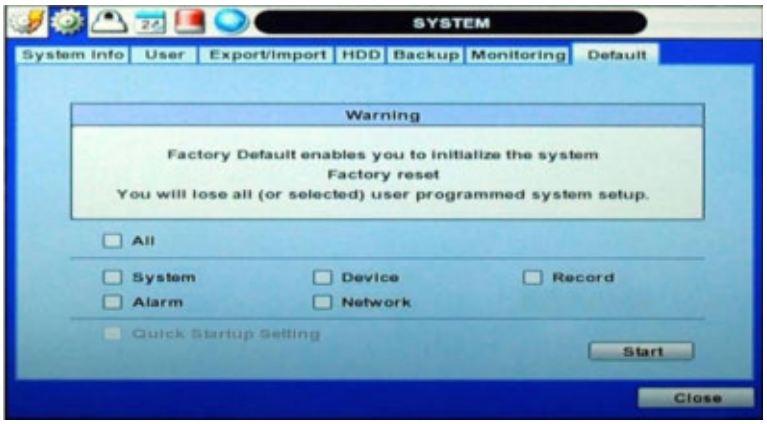
Network status display receiving bandwidth from cameras and transmitting bandwidth to external access in graph. Property shows NVR network information and Client status displayed by external access through network. It keeps showing the time & date with IP address.

Connection log displays camera connection and disconnection history log. It includes channel, time & date, and IP address so that you can check the status with log.



4.1.7 Factory Default

With an authorized password, you can get the system back to factory default configuration.

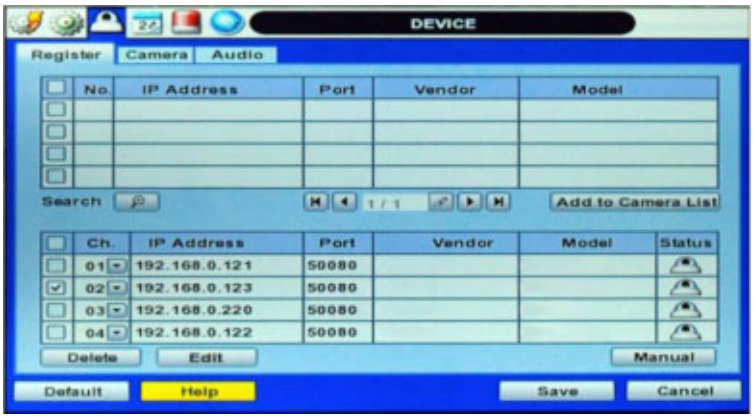


NOTE Upon clicking “Start” button and entering the admin password, all the configuration values made by the user will be deleted. To proceed, select the boxes listed. The boxes that are chosen will be set to factory defaults. However, the recorded video data will not be deleted.

4.2 Device

There are Device sub-menu to set-up Register, Camera and Audio function.

4.2.1 Register

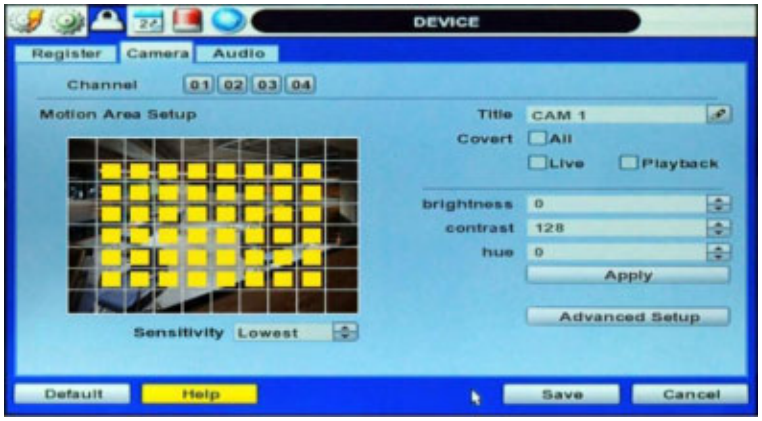


Network cameras should be registered in NVR to transmit the video streaming. Connected cameras can be found on a local network by clicking the 'Search' button. When camera are discovered, you can assign the discovered cameras o specific channels on the NVR by "Add to Camera list". If an added camera channel needs to be changed, please use "CH" drop down menu and select desired channel.

You can search and register manually the cameras in WAN condition. Assign the channel, IP address, login ID, Password. Most important information is RTST URL information from network cameras. If network cameras support more than dual stream, you are able to select the secondary stream.

4.2.2 Camera

You can setup camera title, covert, motion area. "Covert," also called "hidden camera" feature. You can setup a camera on each channel by clicking Channel button '01 ~ 04'.



- **Motion Area Setup**

The default motion area setup relies on network camera setting and direct control of network camera is supported for approved models. Choose the desired motion area by dragging a mouse using left button. The whole image or upto 4 individual areas of the image can be selected. To remove all selections made, click the right button on the mouse and choose 'Clear All'.

Select also "Sensitivity" from 'Lowest to Highest'.

- **Title**

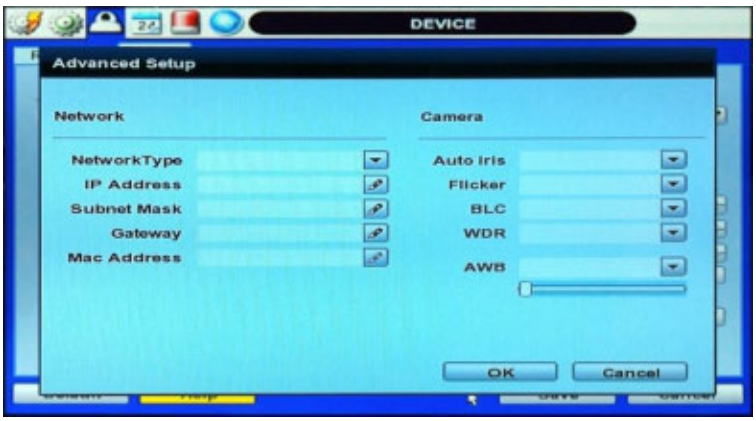
You can name the camera title.

- **Covert**

"Covert," also called 'hidden camera' feature, hides camera display and playback as if there were no camera recording. You can apply this covert function not only to Live view, but also to Playback view.

- **Brightness, Contrast, Hue**

Adjusting brightness, contrast and hue to camera is available. When setting is done, click the 'Apply' button.



- **Advanced Setup**

"Advanced Setup" can be supported by the approved camera only.

Network Type Choose DHCP or Static IP. When choosing Static IP, IP address, Subnet Mask and Gateway will be activated.

IP Address / Subnet Mask / Gateway Type the IP Address, Subnet Mask and Gateway.

Mac Address	Mac Address of the IP camera is not activated.
Auto Iris	Adjusting to the light of screen automatically responding to external Illuminance variation. Not activated.
Flicker	Available to set to Off, 50Hz or 60Hz.
BLC	Back Light Of Compensation. Available to set to On or Off.
WDR	Wide Dynamic Range. Available to set to On or Off.
AWB	Auto White Balance. Available to set to In-Door, Out-Door or Manually setting.

4.2.3 Audio

You can select NVR Input Audio and channel can accept only one of each audio input.

4.3 Record

You can configure various record settings such as Continuous, Motion, and Sensor for each individual camera channel in the Record Setup Menu. Network Stream settings relies on network camera for recording. Approved network camera setting will be set by NVR menu and you can set up streaming video quality, FPS, bitrates in network camera menu as well.

4.3.1 Schedule

You can set up the record schedule by applying various record modes to each date and time. Simply select a record mode by ticking the appropriate box then click and drag over the desired date and time. In a mode of Continuous and Motion, the NVR records data at a rate of 1Frame Per Second(FPS) before the motion occurs(C) and when the motion occurs(M), it records at the setting in the record setup.

4.3.2 Record Setup

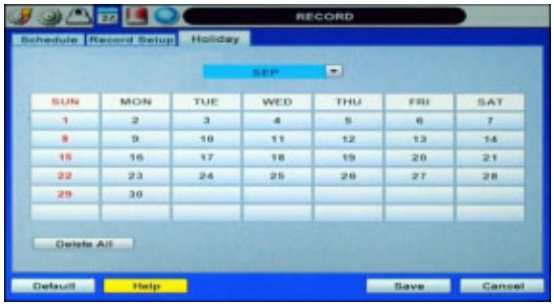
You can set the streaming setup of network camera to record. Main stream record is possible up to 1920*1080 and secondary stream is up to 640*360 with adjustable FPS, Quality, Pre Alarm and Post Alarm.

- **Channel** Select channel to set the registered network camera
- **Resolution** Select resolution up to 1920*1080(Full HD) for main stream and 640*360 for secondary stream.
- **Bit Rate type** Select between CBR(Constant Bit Rate) and VBR(Variable Bit Rate)
- **Quality** Select the desired Quality level(Lowest/Low/Normal/High/Highest)
- **FPS** Select desired FPS(Frame per Second) to record up to 30fps.
- **Pre/Post Alarm** Select desired Pre Alarm time within 5 seconds and Post Alarm time within 15 seconds.

NOTE Due to system performance, Bitrates per channel must be limited to 4,000kbps/CH for Main Stream and 512Kbps/CH for Secondary Stream.

4.3.3 Holiday

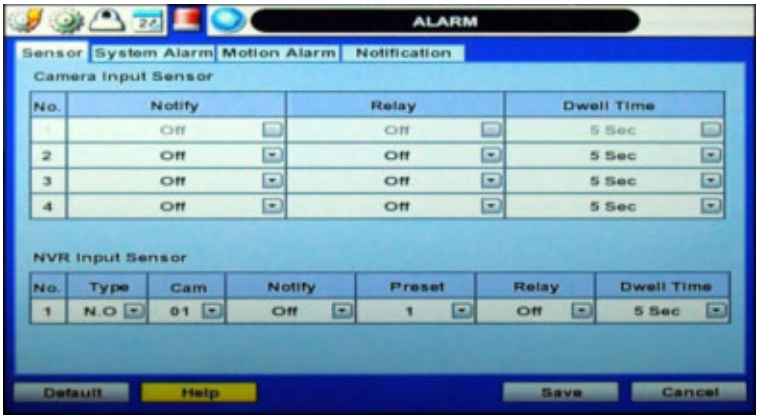
You can setup a specific day of a month or day of week as holiday as shown below. Once the holiday is selected, the recording setup for those holidays will be affected by the schedule setting in the schedule.



4.4 Alarm

4.4.1 Sensor

You can select the sensor input between NVR and supported network cameras. Mapping is only available for either of Network camera sensor or the local sensor of NVR on the same channel.

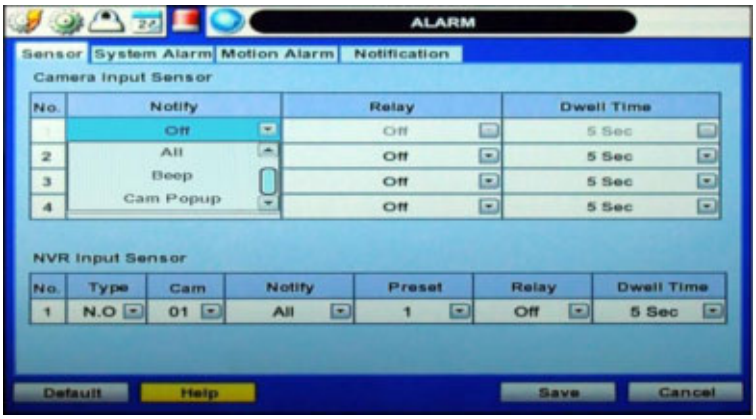


- **Type**
  OFF, N/O (Normal Open), N/C (Normal Close)
- **Cam**
  Select the associated camera channel.
- **Notify**
  You can select how to be alerted when a sensor is activated by pressing the “NOTIFY” button. The system can generate a buzzer sound and/or make a pop-up screen for the camera in alarm.

CAUTION	Relay contact can handle up to 24VDC/1A(or 125VAC/0.5A) of other devices. If connected to a circuit that is over 24VDC/1A(or 125VAC/0.5A), the system may experience problems.

- **Relay**
  Off / Relay Output to trigger other device.

- **Dwell Time**
  Set the recording period from the start of sensor input activation. During this period, the corresponding camera video will record according to the frame and alarm (relay) output set. The recording stops and alarm output is turned off when the dwell time has elapsed.



NOTE	"Sensor" here means the alarm connected to the NVR, which is triggered by physical sensor input or transmitted data from network camera sensor input

NOTE	If the sensor does not operate properly, check the setting of the sensor type (N/O or N/C). The alarm might not function if the actual connecting sensor type and the sensor type in the system setting are inconsistent.

NOTE	There are tree options to choose from the notify of Camera Input Sensor – All, Beep and Cam pop-up. **"Beep"** means that beep sounds automatically when an alarm is triggered. **"Cam pop-up"** means that multi-screen live video mode will be switched automatically to single channel mode, when an alarm is triggered. This single channel video will be the channel triggered by alarm. **"All"** means that using "Beep" and "Cam pop-up" simultaneously when an alarm is triggered.

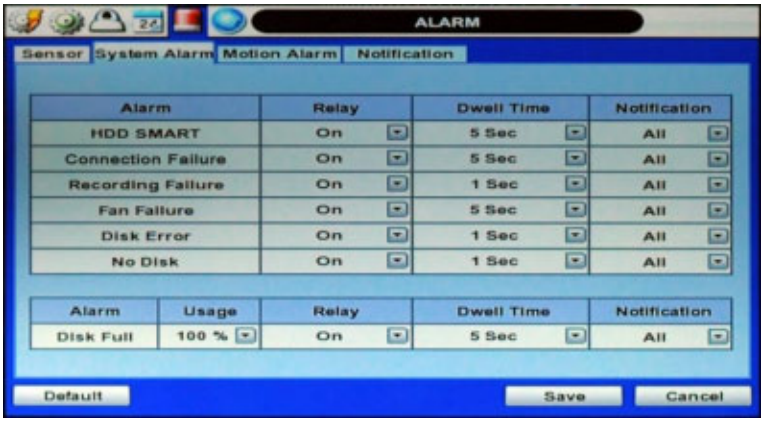
4.4.2 System Alarm

S.M.A.R.T. alarm is an alarm signal triggered when the HDD is about to be out of operation.

Connection Failure. Alarm is activated when camera is disconnected.

Recording failure. Alarm is triggered when NVR doesn't record normally.

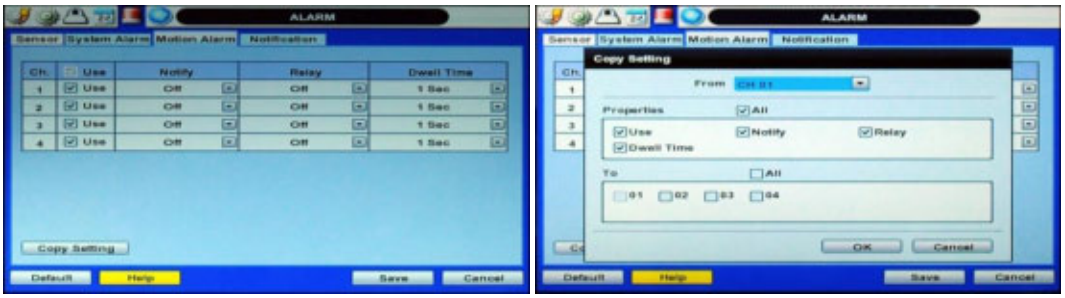
Fan Failure. Alarm is triggered when internal fan is stopped.



You also set the percentage for HDD Usage. For example, when Usage is 50%, NVR will notify by a camera popup or a beep sound when HDD is 50%.

4.4.3 Motion Alarm

Select Motion alarm to record only when motion detection is triggered by NVR S/W upon you defined motion area.
An alarm signal is sent via the selected sensor-out channel.



- **COPY SETTINGS**
  Upon pressing Copy Settings button, Copy Settings popup will appear. In this popup, choose the camera you want to copy at the “From” field. Choose the parameters such as Use, Notify, Relay, and Dwell Time on the check box. Check on the checkbox next to the sensor numbers to apply the copy setting(s) to another channel on the “To” box.

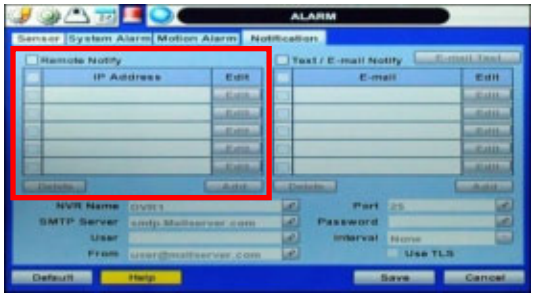
NOTE “Motion Alarm” here means alarm triggered by motion detection set by motion menu of Network Camera.

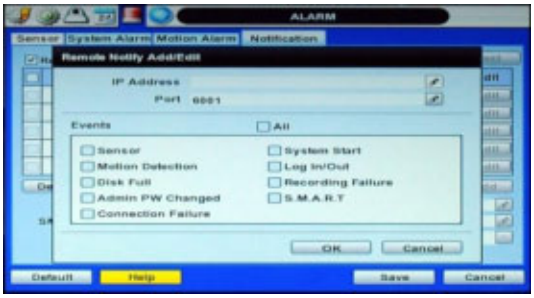
4.4.4 Notification

- **Remote Notify**

The system can notify an alarm message to the IP address of Advanced Client Software over the network.

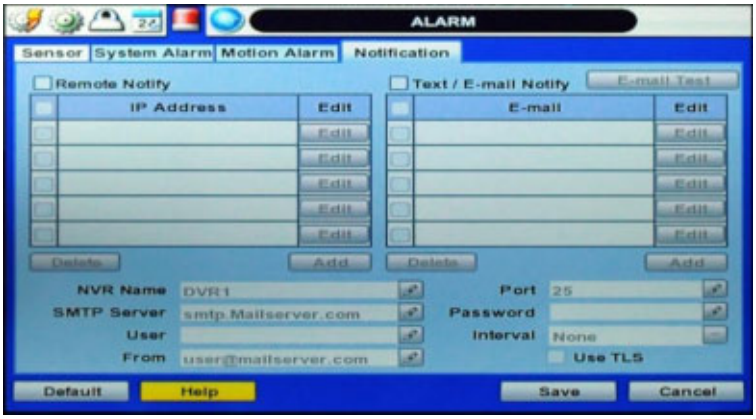
You can choose from a selection of different kinds of alarms by pressing “ADD.” Alarms can be generated by Sensor, Motion Detection, Disk Full, Admin PW Changed, Video Loss, and Power On/Off.





- **E-Mail Notify**

The system can send notification to an Email address or Advanced Client Software and the Central Management System over the network. You can choose from a selection of different kinds of alarms by pressing "ADD." Alarms can be generated by Sensor, Motion Detection, Disk Full, Admin PW Changed, Video Loss, and Power On/Off. By clicking "Use TLS", you can use a public email address such as Yahoo, Google, Hotmail accounts. Type NVR name in the "NVR Name" box. The NVR name will appear in the email so that you can recognize which NVR sent an email.



NOTE	Configuration's first priority is always given to "Schedule Setup" of the "RECORD" menu. Thus, the system will not send alarm message or email notification upon motion alarm or sensor even though you tick the checkbox of above event selection, unless you set the "Schedule Setup" in the "RECORD" menu. For example, if you set "Continuous" only for "Schedule Setup" of the "RECORD" menu and marks the "All" checkbox in "REMOTE NOTIFY", then the system will not send alarm messages. In this case, you have to set "C + M", "MOTION", "SENSOR" or "C+ S" for REMOTE NOTIFY or E-Mail NOTIFY to function properly.

4.5 Network

4.5.1 Network

The system has built-in web server.

- **Internet Protocol Version**

Not selectable. TCP / IP v4 support only.

- **Network Type**

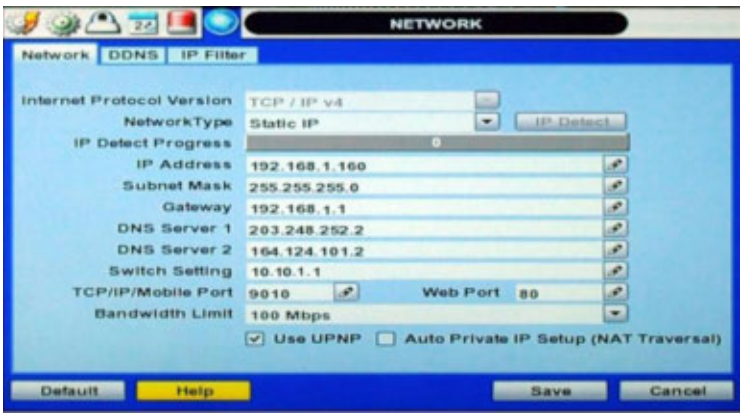
Select network connect type. Select either LAN for fixed (Static) IP or DHCP for dynamic IP.
If DHCP is selected, click 'IP DETECT' button to detect IP address information.

- **Subnet Mask**

Subnet Mask address classifies the subnet that the system belongs to. Standard address is 255.255.255.0. For more information, please consult your network administrator or your internet service provider

- **Gateway**

This is the IP address of the network router or gateway server. It is required when you want to connect through the external router from the remote. For more information, please consult your network administrator or your internet service provider



- **DNS Server**

Enter the IP address of the Domain Name Server. There are two DNS settings. (The preferred DNS and the alternative DNS)
*You should enter the DNS Server information in order to use internet. (Provided by your ISP)

- **Switch Setting**

When PoE option is applied, you can put the camera into PoE port directly. The network setting for PoE port will be designed independently. This IP range should not be the same range of NVR IP address.

- **TCP/IP Port**

Enter the port number to use when connecting locally or remotely.

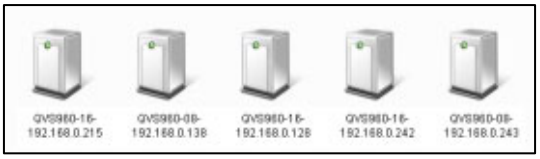
- **Web Port**

Enter the port number to use when connecting from the Web Browser.

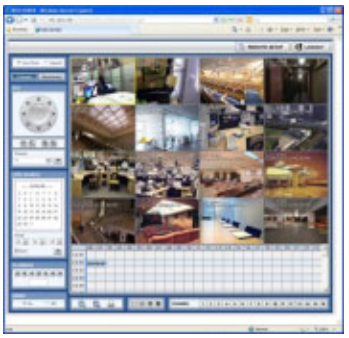
NOTE TCP/IP Port, Web Port should be a different number from each other.

- **UPnP (Universal Plug and Play) and Auto Private IP Setup (NAT Traversal)**

UPnP stands for Universal Plug and Play, which is a relatively new technology that indicates a universal protocol for widespread plug-and-play devices to ease the network implementation. When a PC and a NVR both installed the UPnP function, the PC can automatically recognize the NVR in the same local area network. The advantage of this function is that a PC can connect to the NVR directly by clicking on the icon representing the NVR in <My Network Places> folder as shown below. The first five characters of the file name of a detected NVR is subject to a firmware version



Simply double click on the desired icon. Then, it will open an internet browser that connects to the NVR via the remote control software as shown below. Please type in your User ID and Password to login and click 'Connect' button to connect.



- **Auto Private IP Setup (NAT Traversal)**

The UPnP NAT Traversal function will help to automatically setup a router if the NVR connects to the internet via a router.

When a PC connects to a NVR, which is not in the same local area network, a real IPO address and corresponding port number is required. However if the NVR is behind a router, the communication between the PC and the NVR will be transmitted back and forth by the router. The router will need to setup port mapping (Port Forwarding) before images from the NVR is remotely viewed on the PC. For each individual NVR, the setting needs to be done individually.

If the NVR has UPnP NAT traversal function, the setting of the router will be done automatically when it is enabled.

Just check 'Auto IP (NAT Traversal)' check box in the UPnP setup menu. Then it will take care of Auto IP detect by itself.

NOTE	The system transfers video images at real-time over the network even during no record. For example, you can monitor live video even when motion has not occurred during motion detection mode.

NOTE	If there is no physical network connection, it may take a few minutes for the system to start working, since the network configuration in DHCP mode and the DHCP connection cannot be made.

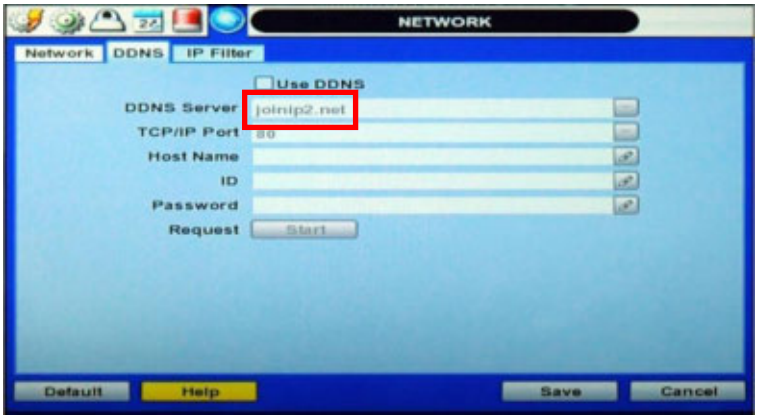
4.5.2 DDNS

You have to tick the "Use DDNS" check box to use it.

- **DDNS Server**

joinip.net or joinip2.net is the fixed domain name of DDNS server.

You cannot change the DDNS name.

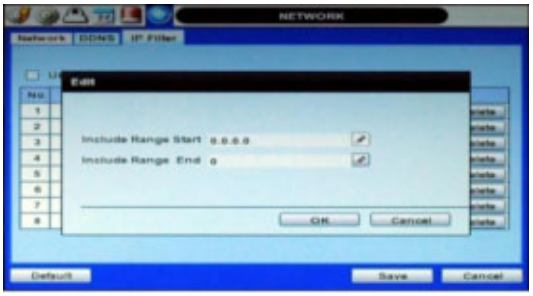


NOTE	The standard(default) DDNS domain name is joinip2.net, and you can use joinip.net or dyndns.com by drop-down list.

4.5.3 IP Filter

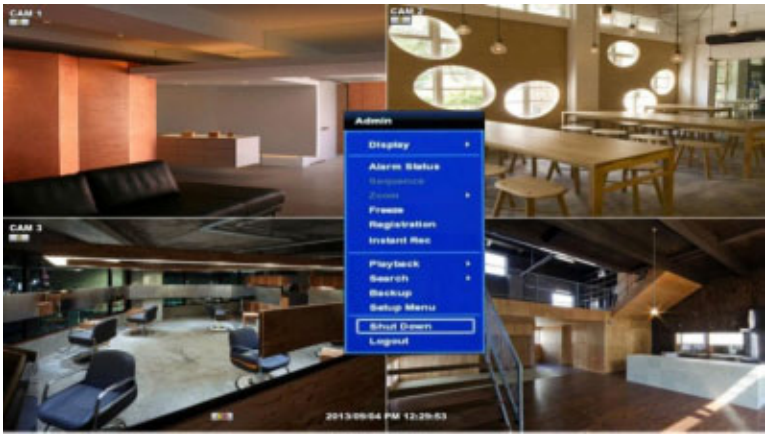
You can block and allow the specific IP addresses to manage. Check the box 'Use IP Filter' first to allow some specific IP addresses to use. The default is 0.0.0.0 / 0.

Select 'Edit' to input the desired IP address range. When registered setting is needed to be changed, you can select 'Edit' or 'Delete'.

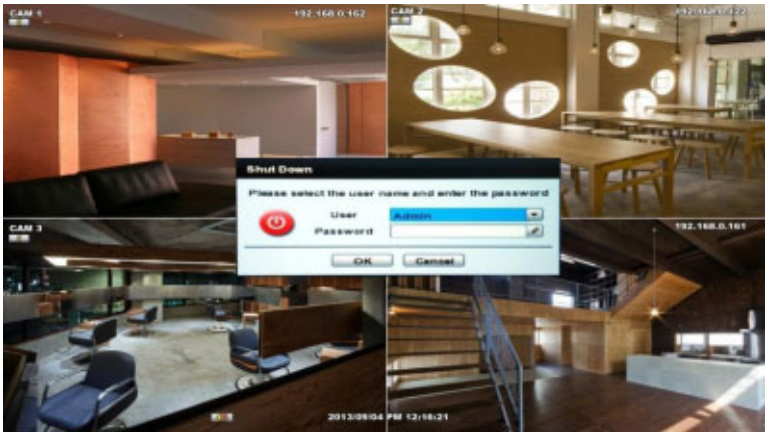


4.5.4 System Shutdown and change password

The system can be power off by 'Shut Down' button. The 'Shut Down' can be done by clicking a right button of mouse.



The default password for 'admin' account is none. Therefore, just click 'OK' button on the popup window. If you change the password for 'admin' account, please type in the changed password to login.



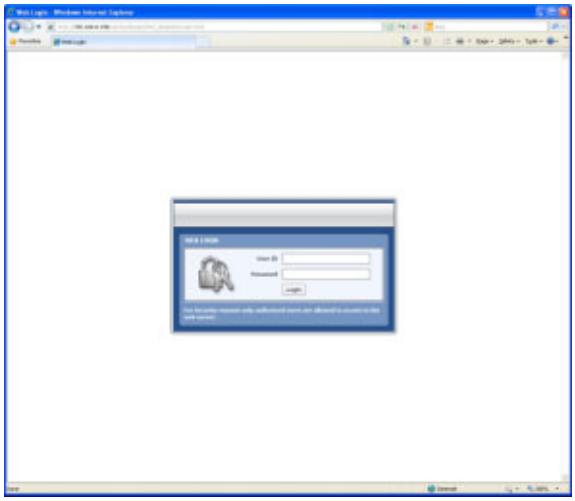
NOTE You can type in the password using the virtual keyboard through a mouse.

5 WEB SURVEILLANCE

The system has a built-in web server.
Using an ordinary web-browser over a network, you can always stay connected to the system for live monitoring, playback, or remote configuration without installing the Advanced Client Software (ACS).

5.1 Web Login

You need to input the correct IP address in the web browser after making the web port available in the router.
After allowing the download of the Active-X file, The login page view seen below. Default User ID is "admin" and No password.



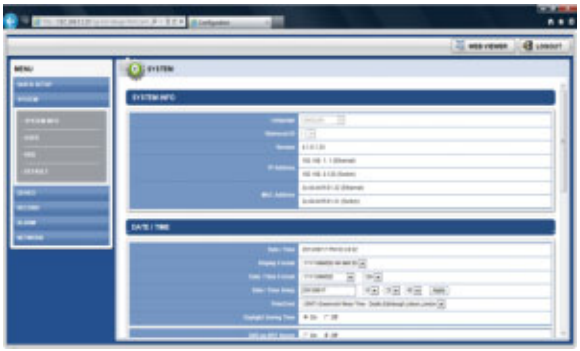
5.2 Web Configuration

Menu of Web Configuration

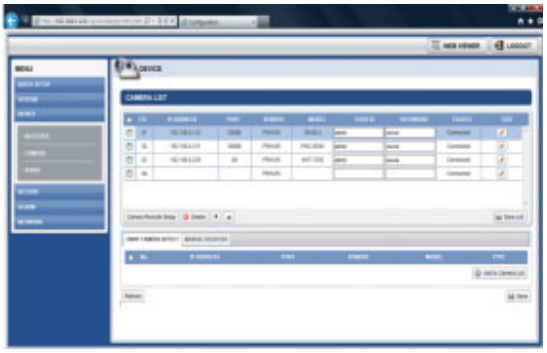
Main Classification	Sub Classification
QUICK SETUP	NVR
	REGISTER
SYSTEM	SYSTEM INFO.
	USER
	HDD
	DEFAULT
DEVICE	REGISTER
	CAMERA
	AUDIO
RECORD	RECORD SETUP
	SCHEDULE
ALARM	SENSOR
	SYSTEM
	MOTION
	NOTIFICATION
NETWORK	NETWORK
	DDNS
	IP FILTER

After logging in with the right ID and password, you can make various configuration changes in the Web Configuration window seen below. This Web Configuration menu is only available to the “admin” account.

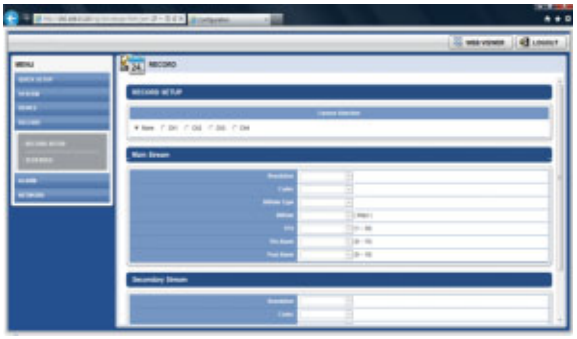
[System]



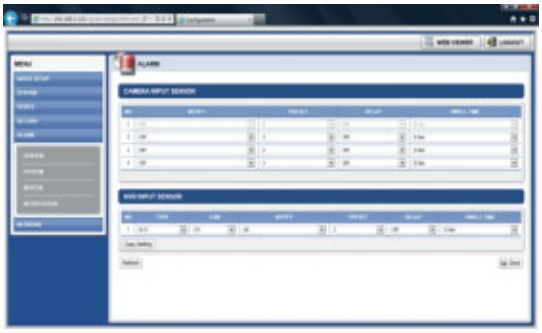
[Device]



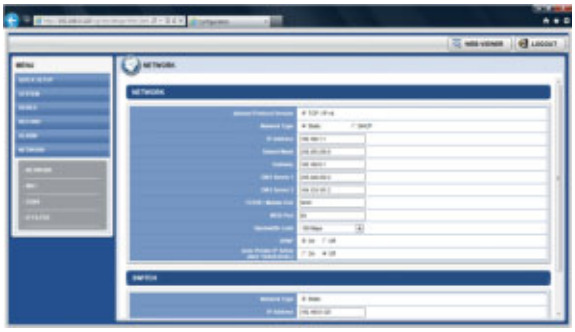
[Record]



[Network]



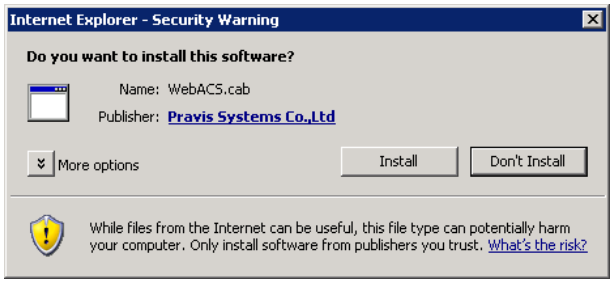
[Quick Setup]

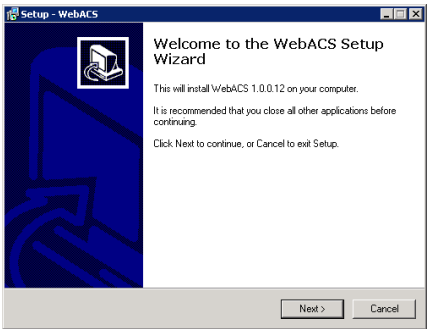


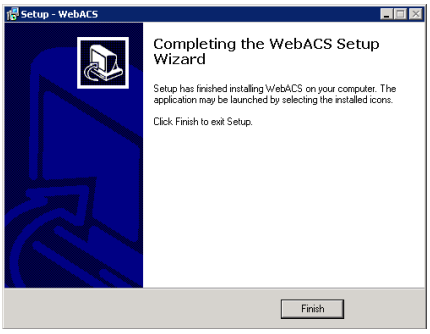
NOTE This NVR system has its own built-in web server.
This web CGI screen is directly supported from the built-in web server in the NVR, regardless of Internet connection.

5.3 Web monitoring

You have to download Active-X file from NVR and install it at workstation PC before monitoring live video.

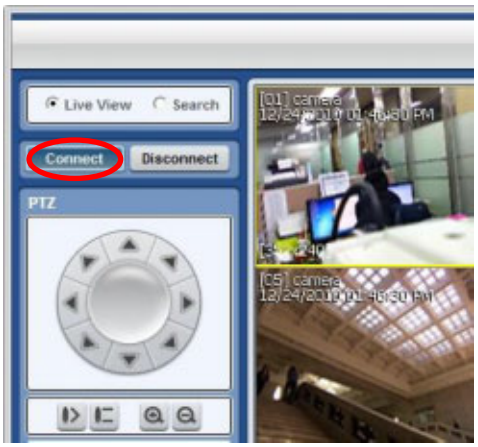

Internet Explorer - Security Warning
Do you want to install this software?
Name: WebACS.cab
Publisher: Pravis Systems Co.,Ltd
More options
Install
Don't Install
While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. What's the risk?


Setup - WebACS
Welcome to the WebACS Setup Wizard
This will install WebACS 1.0.0.12 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

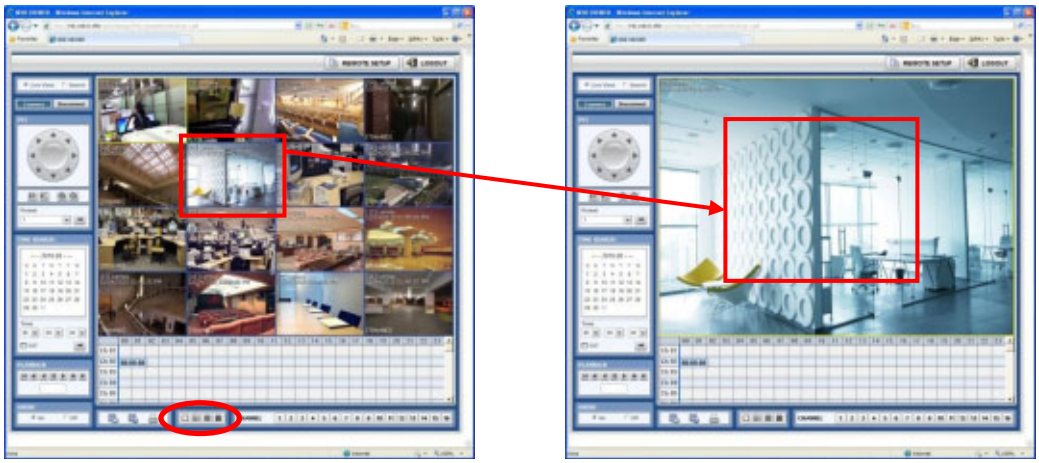

Setup - WebACS
Completing the WebACS Setup Wizard
Setup has finished installing WebACS on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Finish

[Web Active X Install]

You can get into web monitoring after log in as shown below. In order to connect to NVR, you have to click " Connect " button which is located at the top left corner.



You can monitor live video in 1, 4, 9 or 16 screen modes. If you want to see single channel in full screen, you can double-click on the left mouse button when the cursor is positioned on the live video screen. You can change to single mode by clicking the mode icon located at the bottom left.

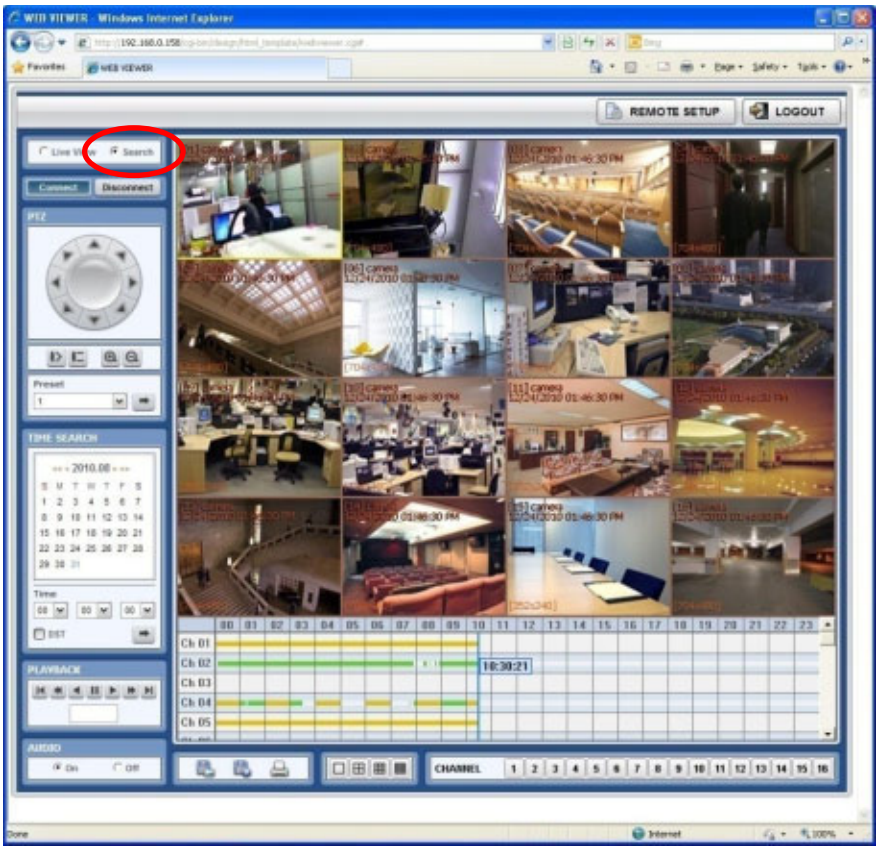


NOTE The image resolution in "Live monitoring" in this web browser is directly transferred from NVR
(Live image over the web browser depends on the Live Stream value on Record mode of NVR)

NOTE If live image is not properly shown on IE web browser due to network traffic jam or narrow bandwidth, it is recommended to close and re-open the IE web browser.

5.4 Web Playback

You can remotely playback the NVR images by clicking “SEARCH” button in the middle of bottom window. In order to connect to NVR, the you have to click “ Connect ” button which is located at the top left corner.



- **Playback Time**

Select the date and time on Time Search, located at the middle of left side of window, and click button.

- **Playback Icon**

Play/Pause is toggled and playback speed is shown on the left box.

- **Play DST**

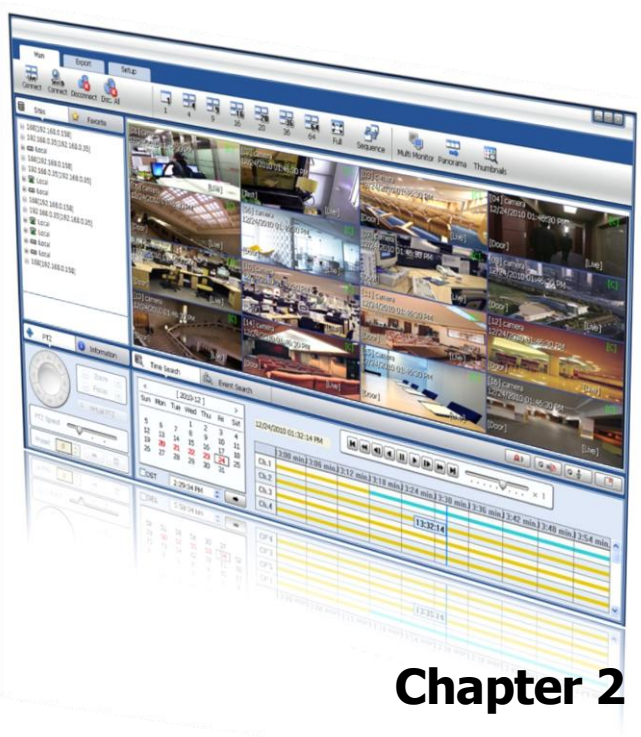
Check this box to play overlapped images during DST (Daylight Saving Time) period.

For further details, please refer to Section 3.7 (DST Setting and Image Playback).

- **Search Bar**

You can move the blue vertical line to the time that you want to search.

The colours of the time bar are different by each recording mode. Please, refer to Section 4.3.2 for details on colour.



Chapter 2

CMS CLIENT SOFTWARE USER MANUAL

6 CMS USER GUIDE

6.1 PC REQUIREMENT

Recommended PC Requirement

OS	Windows 7, 8
CPU	Intel Core i7
VGA	ATI Radeon HD 1GB RAM
RAM	8GB
HDD	100MB Free space

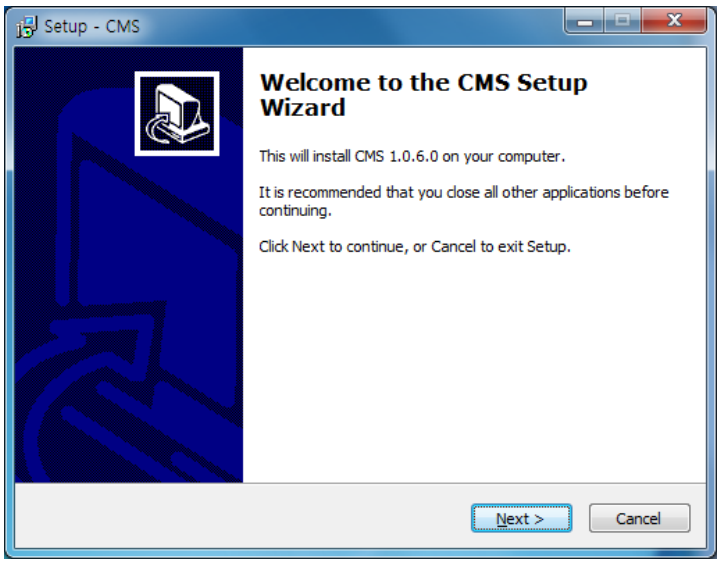
Minimum PC Requirement

OS	Windows 7, 8
CPU	Intel Core i5
VGA	ATI Radeon HD 512MB RAM
RAM	4GB
HDD	20MB Free space

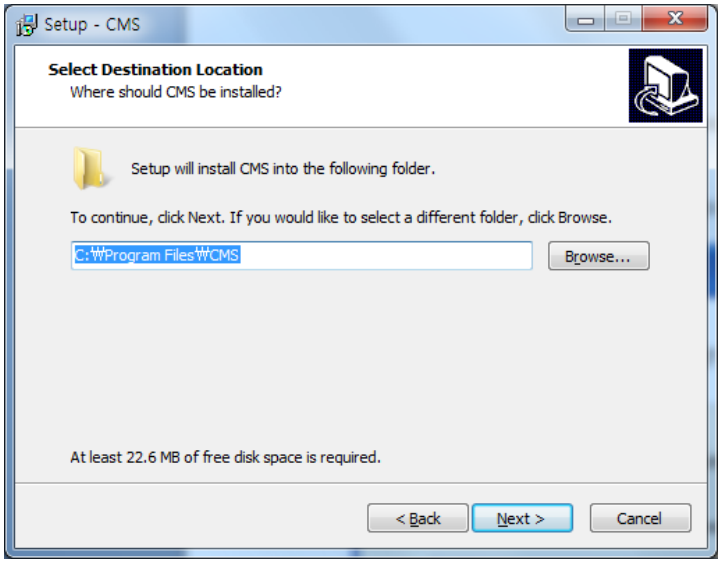
6.2 INSTALL

Run **Central Management Software Setup.exe** saved on the included CD.

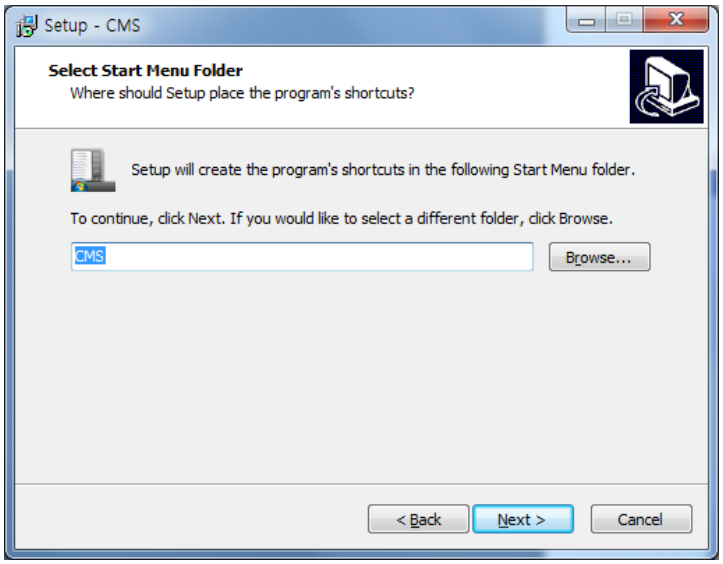
When clicked, the Setup Menu will appear.


Setup - CMS
Welcome to the CMS Setup Wizard
This will install CMS 1.0.6.0 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

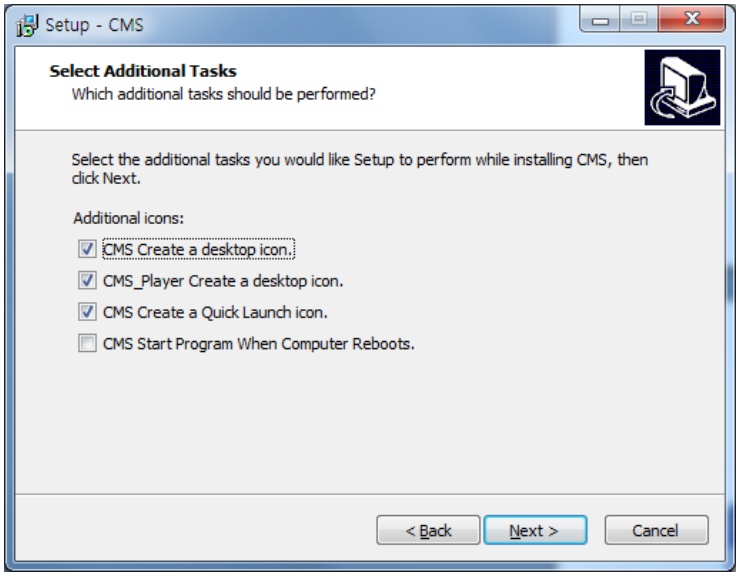
Press Browse... if you want to install the program in a different directory.


Setup - CMS
Select Destination Location
Where should CMS be installed?
Setup will install CMS into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:₩Program Files₩CMS
Browse...
At least 22.6 MB of free disk space is required.
< Back
Next >
Cancel

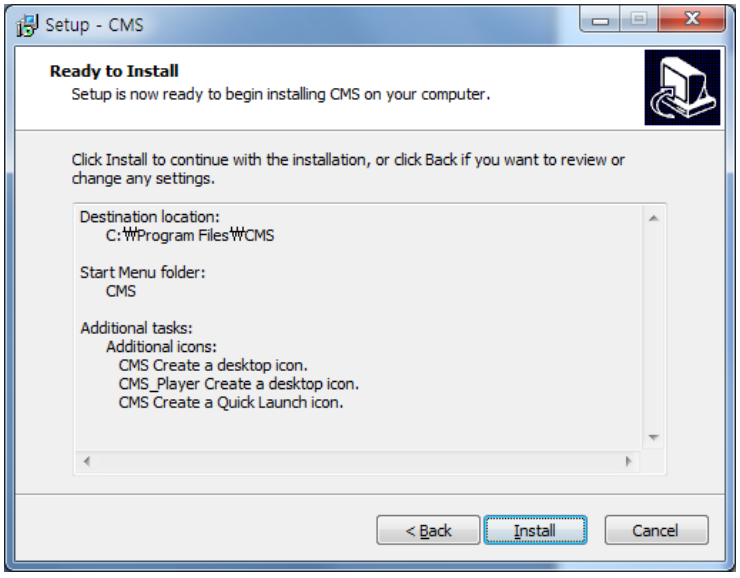
Press Next > to move to the next screen.


Setup - CMS
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
CMS
Browse...
< Back
Next >
Cancel

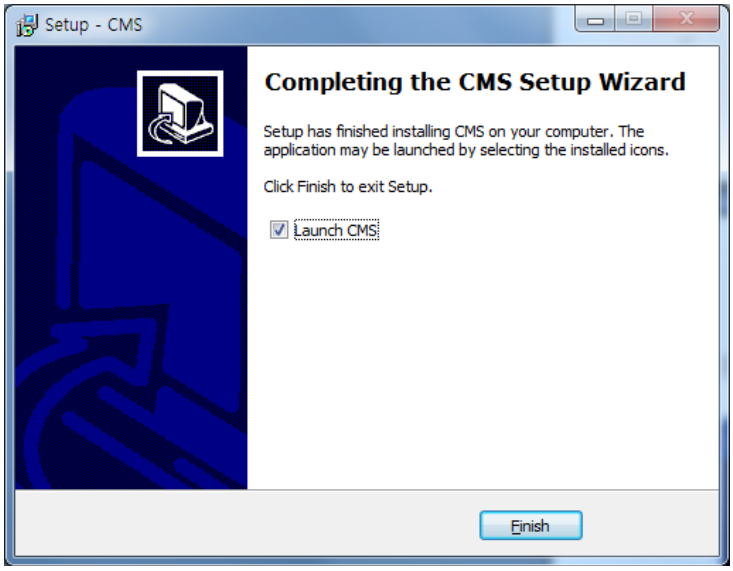
Press Next > to move to the next screen.


Setup - CMS
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing CMS, then click Next.
Additional icons:
CMS Create a desktop icon.
CMS_Player Create a desktop icon.
CMS Create a Quick Launch icon.
CMS Start Program When Computer Reboots.
< Back
Next >
Cancel

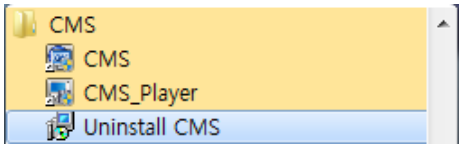
Press Next > to move to the next screen.


Setup - CMS
Ready to Install
Setup is now ready to begin installing CMS on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:₩Program Files₩CMS
Start Menu folder:
CMS
Additional tasks:
Additional icons:
CMS Create a desktop icon.
CMS_Player Create a desktop icon.
CMS Create a Quick Launch icon.
< Back
Install
Cancel

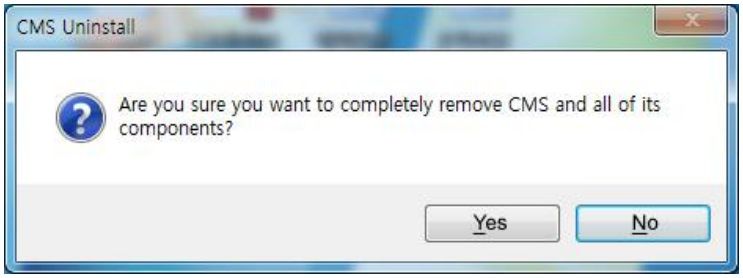
Click Install to begin installation. When the installation is complete, the following message will be appeared.


Setup - CMS
Completing the CMS Setup Wizard
Setup has finished installing CMS on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch CMS
Finish

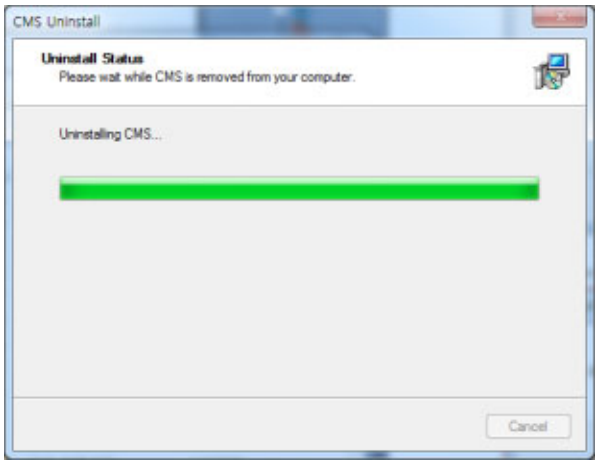
6.3 UNINSTALL



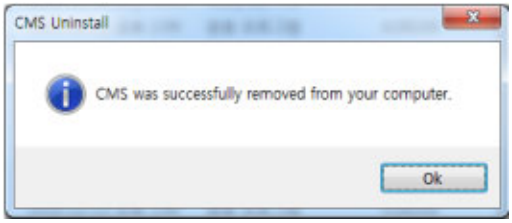
To uninstall CMS, press **UNINSTALL CMS** from Start Menu of your PC.



A window will appear in Windows7 or Windows Vista. Press **YES** to begin the process. The following window will appear.



When the process is complete, the below message will appear.

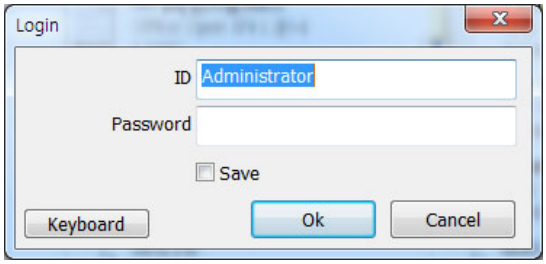


6.4 BASIC OPERATION

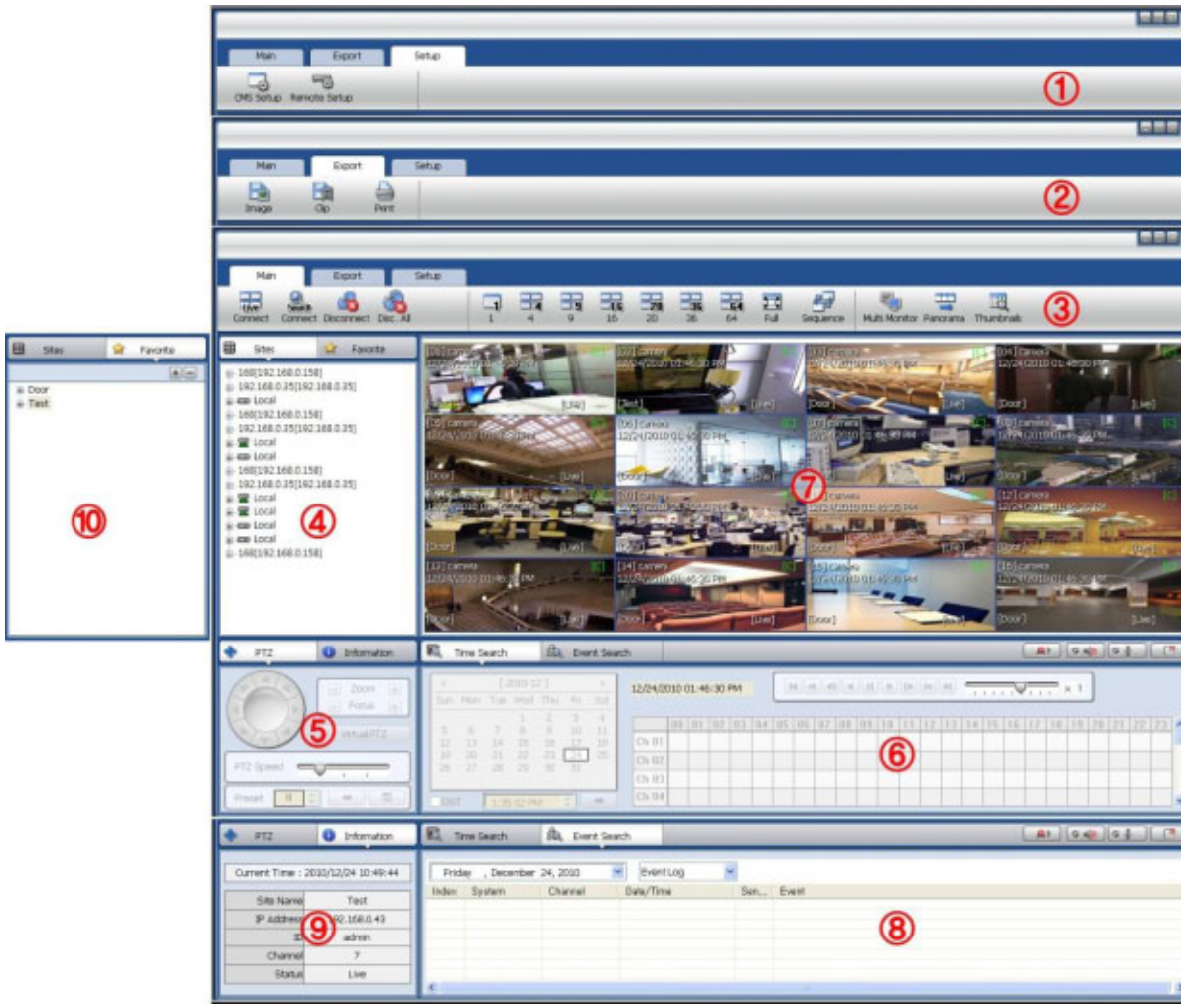
Click on **CMS** icon on Desktop or click **START** on Windows PC and go to CMS Folder.

6.4.1 LOG IN

The default ID is Administrator, and there is no default password so please leave it blank. The administrator account has the highest level of authority on the CMS.



6.4.2 SCREEN LAYOUT



No	Item	Description
1	Main Toolbar (Setup Tab)	The Main Toolbar has three (3) selectable tabs named "Main", "Export" and "Setup". In the Setup tab, there are CMS setup and Remote setup.
2	Main Toolbar (Export Tab)	In the Export tab, able to save JPEG, AVI and Print the images.
3	Main Toolbar (Main Tab)	In the Main tab, able to connect Live and Search, disconnect, change display mode and sequence, Panorama Search and Thumbnail Search.
4	Site List Panel	All of the registered sites in the setup tab are shown in the site list. Simply drag and drop the desired site to the display screen to connect to the site.
5	PTZ Panel	PTZ camera control is not available on the NVR system.
6	Search Panel	In the Search mode, the recording information per each channel will be displayed, when a specific date is selected in the calendar.
7	Display Panel	This is the area where live view and search view are displayed.
8	Event Search Panel	CMS also can receive all of events from DEVICE, and they are listed in this panel. An event data can be searched by double-clicking on an event.
9	Information Panel	Shows the current time and site information of the selected channel.
10	Favorite Panel	Create favorite site for quick access to the sites frequently viewed.

6.4.3 MAIN TOOLBAR (SETUP)

No	Item	Description
1	CMS Setup	Register sites, setup for user authority, and setup other CMS properties.
2	Remote Setup	Access the setup menu of DEVICE remotely and change the settings.
3	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

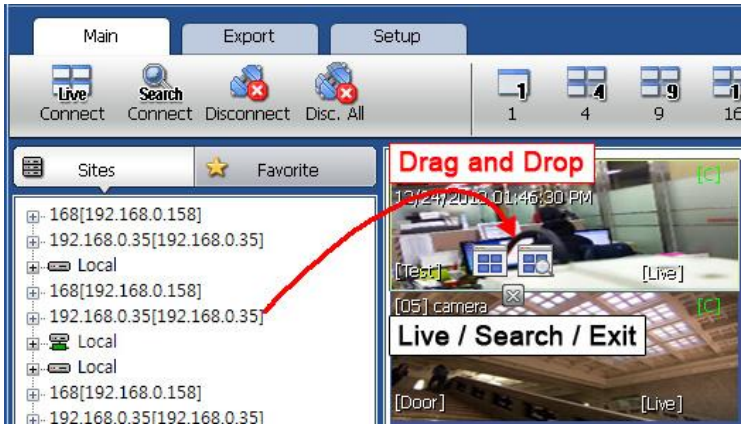
6.4.4 MAIN TOOLBAR (EXPORT)

No	Item	Description
1	Image	Capture the image of the selected (focused) channel.
2	Movie	Save the selected channel in ASF format movie file.
3	Print	Print the selected channel.
4	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

6.4.5 MAIN TOOLBAR (MAIN)

No	Item	Description
1	Live	Connect to the selected site in the site list in Live mode.
2	Search	Connect to the selected site in the site list in Search mode.
3	Disconnect	Disconnect the selected single channel.
4	Disconnect All	Disconnect all of the connected sites and channels.
5	Display Mode	Change the display mode in single, 4 split, 9 split, 16 split, 20 split, 36 split, 64 split.
6	Full	Shows Full screen display.
7	Sequence	Sequences the different channel displays.
8	Dual Monitor	Create an additional display window.
9	Panorama	Able to show frame by frame display for a selected single channel in Search mode.
10	Thumbnails	Thumbnail search for a selected single channel in Search mode.
11	Windows Exit	Minimize/Maximize the CMS Window or close the CMS program.

6.4.6 SITE LIST



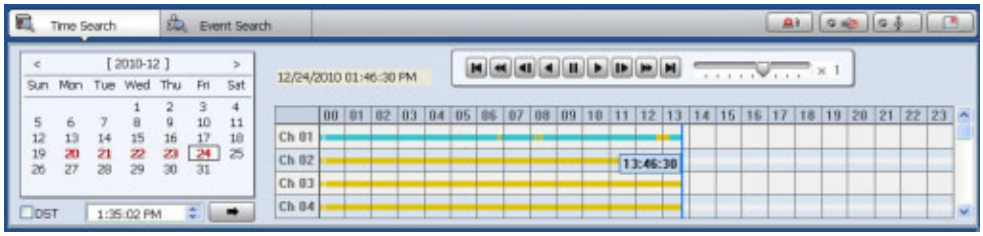
The Site List displays all of the DEVICE that are currently setup for remote connection with the CMS application, and its cameras are available for view.

From the Site List Panel, select the desired camera and drag it on to the viewing area. Then, select the options Live or Search ( ).

If an DEVICE site is dragged onto the viewable area, then the selected DEVICE or all cameras from the DEVICE will display.

6.4.7 SEARCH

The Search panel is activated only in Search mode.



When you connect to a site in Search mode, the date is highlighted in Red colour in the calendar, if the recorded data exist. Select a specific date in the calendar and then recording information will be shown in the table.

(Go button) should be pressed to start playback from the selected time.

If DST is enabled, the earlier one-hour overlapped video will be shown first.

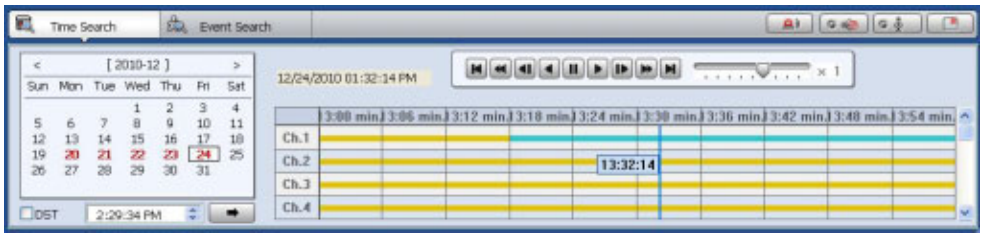
Each record mode is similar to below.

No Record	White
Continuous (Yellow Color)	
Instant (Red Color)	
Alarm (Orange Color)	
Motion (Green Color)	

Click the time or move the time bar to the time you want to playback in the search panel.

For a more detailed search like below, double-click the time that you want to jump into.

Detailed search is available on a 6 minute basis like below.



Playback Control Panel

No.	Button	Description
1		Go to First.
2		Forward Playback : Decrease the speed / Reverse Playback : Increase the speed.
3		Step Forward.
4		Reverse Playback.
5		Pause.
6		Forward Playback.
7		Step Backward.
8		Forward Playback : Increase the speed / Reverse Playback : Decrease the speed.
9		Go to Last.

Audio control

Audio On/Off: Turn On or Off for Audio channel.

Two-way Audio: Two-Audio between CMS and DEVICE.

Bookmark: Bookmark the selected channel to the bookmark list.

6.4.8 DISPLAY

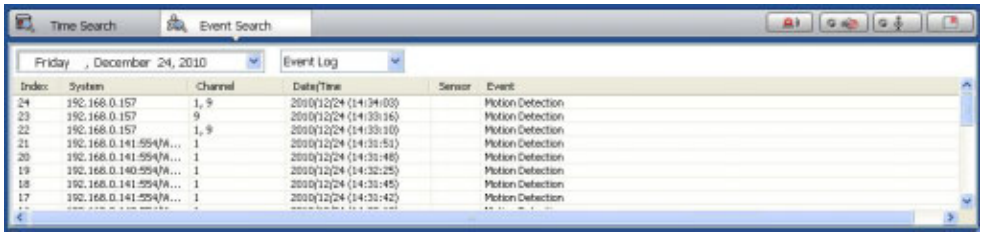
In live mode, the text LIVE will be displayed in white, and the channel will be bordered in blue.

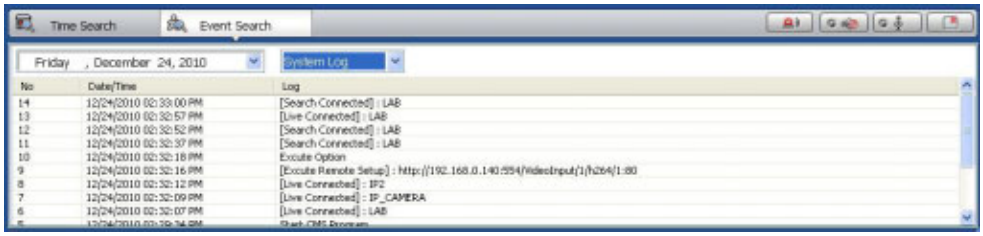
In search mode, the text SEARCH will be displayed in red, and the channel will be bordered in red.

The selected channel will be bordered in yellow. The site name will be shown at the lower left hand corner of the screen.

6.4.9 EVENT SEARCH

CMS can receive any event data from the DEVICE as shown below.




Time Search
Event Search
Friday , December 24, 2010
System Log
No
Date/Time
Log
14 12/24/2010 02:33:00 PM [Search Connected] : LAB
13 12/24/2010 02:32:57 PM [Live Connected] : LAB
12 12/24/2010 02:32:52 PM [Search Connected] : LAB
11 12/24/2010 02:32:37 PM [Search Connected] : LAB
10 12/24/2010 02:32:18 PM Excute Option
9 12/24/2010 02:32:16 PM [Excute Remote Setup] : http://192.168.0.140:554/VideoInput/1/h264/1:80
8 12/24/2010 02:32:12 PM [Live Connected] : IP2
7 12/24/2010 02:32:09 PM [Live Connected] : IP_CAMERA
6 12/24/2010 02:32:07 PM [Live Connected] : LAB

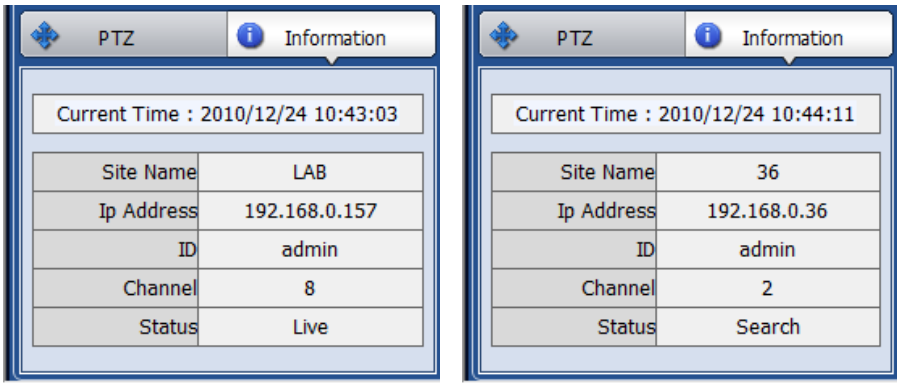
You can select a desired date to view the event list of the selected date.

You can choose either event log or system log.

Start the playback by double-clicking the Index number of each even list.

System log shows CMS start/end, live/search, option, remote setup, image/movie export etc.

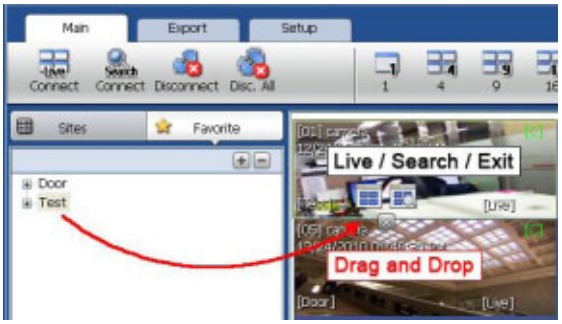
6.4.10 INFORMATION



The current date/time, site name, IP address, ID, channel and Live/Search status will be shown.

6.4.11 FAVORITE

Cameras currently displayed on the screen can be added, deleted and edited as a favorite site group.



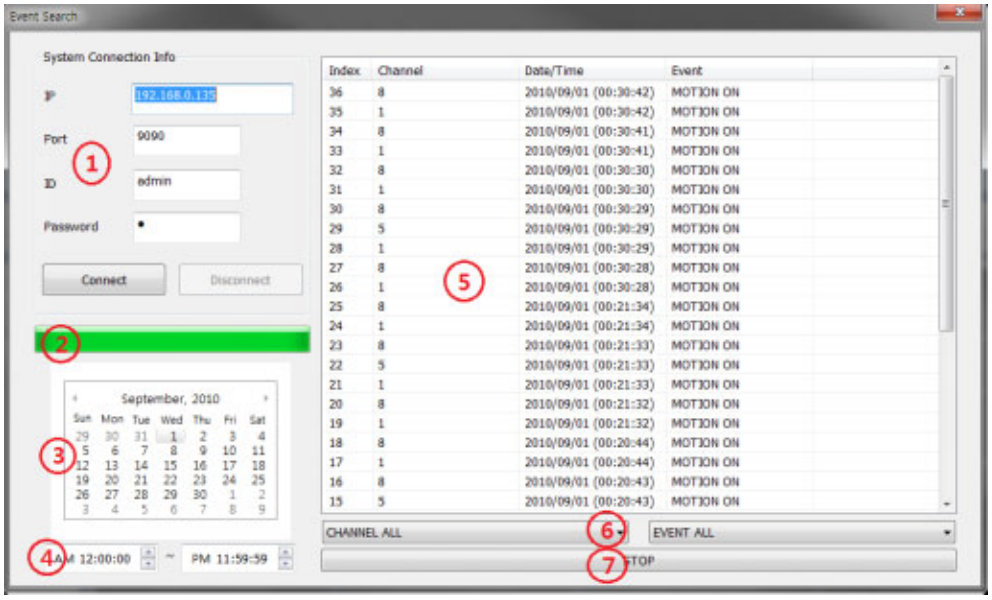
Place cameras of DEVICE site into a desired channel location of the screen and then click to create a new favorite site group. Then, you can simply place those cameras on the same channel location by drag & drop as shown below. In order to delete the favorite site, click to delete it.

6.5 CMS FUNCTIONS

6.5.1 EVENT SEARCH

When you right click on a site in the site list, the quick access menu will be shown.

Select **EVENT SEARCH** to run Event Search.

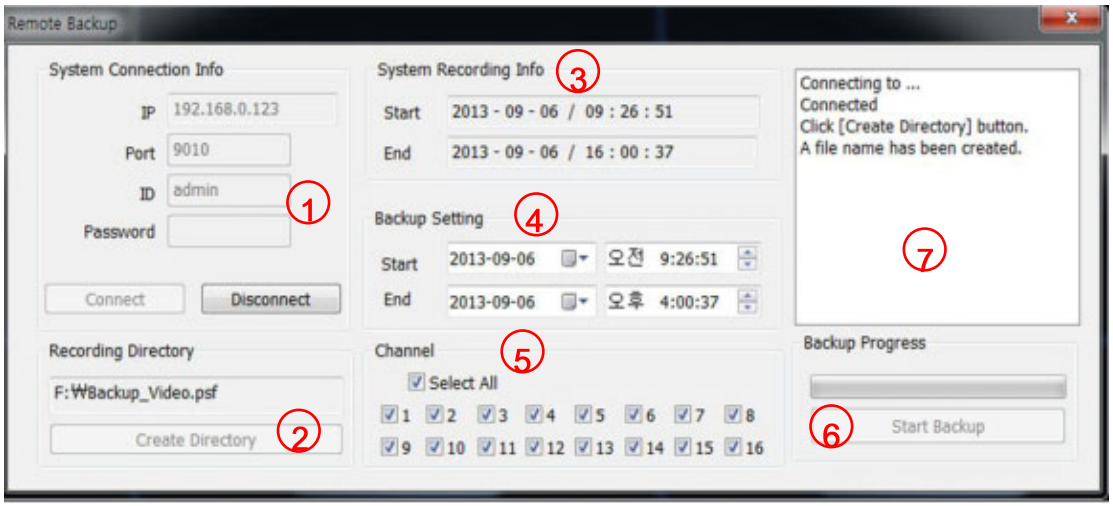


No	Item	Description
1	System Connection Info	Input the information of DEVICE to connect.
2	Event Download Status	Right after connecting to DEVICE, event information will be downloaded automatically. The download progress bar will be shown.
3	Calendar Search	If there is an event in the selected date, the date is highlighted. Select a specific date to start event search.
4	Interval Setup	Set the interval for event search.
5	Event List	The desired date is chosen, the event list of the desired date will be shown on the list.
6	Channel/Event Filter	Event information can be sorted by a channel or event type..
7	Start/Stop Search	Start/Stop Search button.

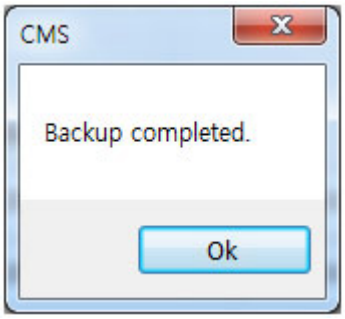
6.5.2 REMOTE BACKUP

When you right click on a site in the site list, the quick access menu will be shown.

Select **REMOTE BACKUP** to run Remote Backup.



No	Item	Description
1	System Connection Info	Input the information of DEVICE to connect.
2	Recording Directory	Decide the recording directory to backup.
3	System Recording Info	Displays the start and end time of the recorded data in the system.
4	Backup Setting	Setup the start and end time of the data to backup.
5	Channel	Select the channel to backup..
6	Backup Progress	Backup Progress bar indicates the backup process status.
7	Backup Status Window	Displays the backup status in text message.

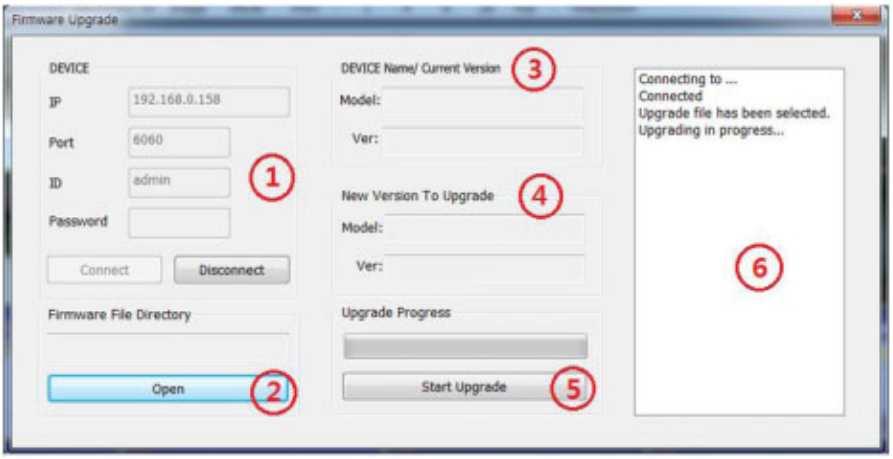


When the backup process is completed, "Backup Completed" message will appear.

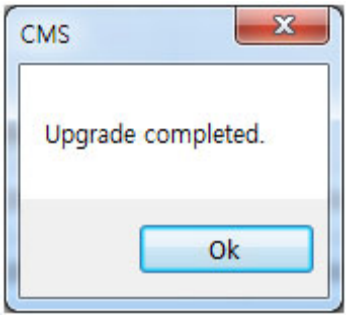
6.5.3 FIRMWARE UPGRADE

When you right click on a site in the site list, the quick access menu will be shown.

Select **FIRMWARE UPGRADE** to run Firmware Upgrade.



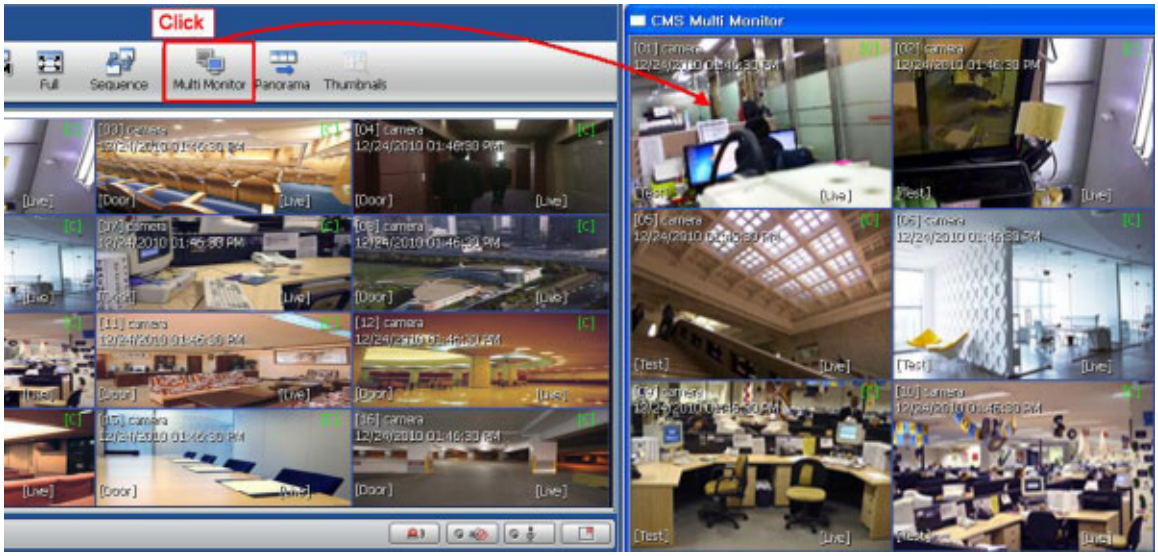
No	Item	Description
1	DEVICE Connection Info	Input the information of DEVICE to connect.
2	Firmware File Directory	Decide the firmware file directory to upgrade.
3	DEVICE Name/ Current Version	Displays the current DEVICE Name and Firmware Version.
4	New Version to upgrade	Displays the new DEVICE Name and Firmware Version.
5	Upgrade Progress	Start Upgrade and upgrade progress bar shows the upgrade progress status.
6	Upgrade Status Window	Displays the upgrade status in text message.



When the backup process is completed, "Backup Completed" message will appear.

6.5.4 MULTI MONITOR

Click **MULTI MONITOR** in the Main Toolbar to run the Multi Monitor function.



When you click **MULTI MONITOR**, you will see another separate window with the same split display as the main window.

6.5.5 PANORAMA

Click **PANORAMA** in the main tool bar to run Panorama View.

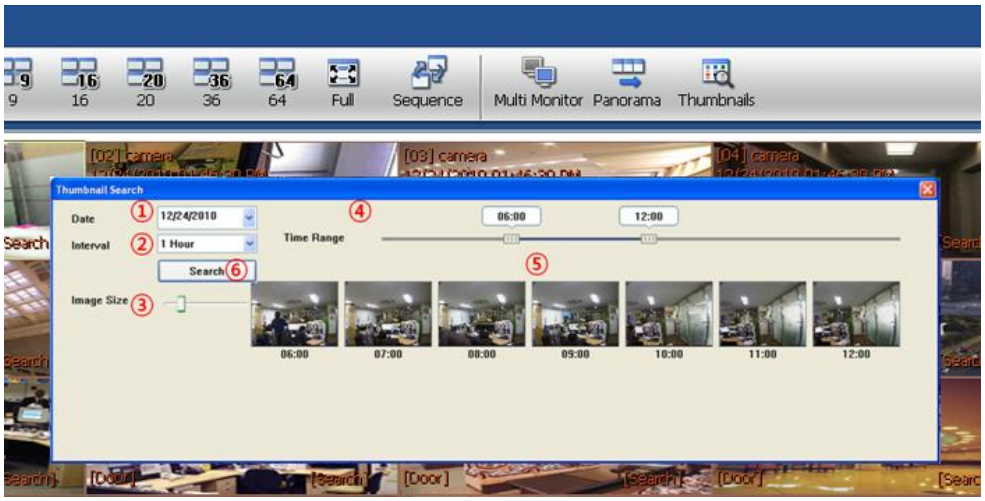
In Live mode or Search mode, the panorama shows frame by frame display of the selected single channel.

To return to normal view, click **PANORAMA** again.

6.5.6 THUMBNAIL SEARCH

Click **THUMBNAIL** in the main toolbar to run Thumbnail Search. This feature is only available in Search mode.

First select a channel and click **THUMBNAIL**; then, you will see the Thumbnail Search window as shown below.



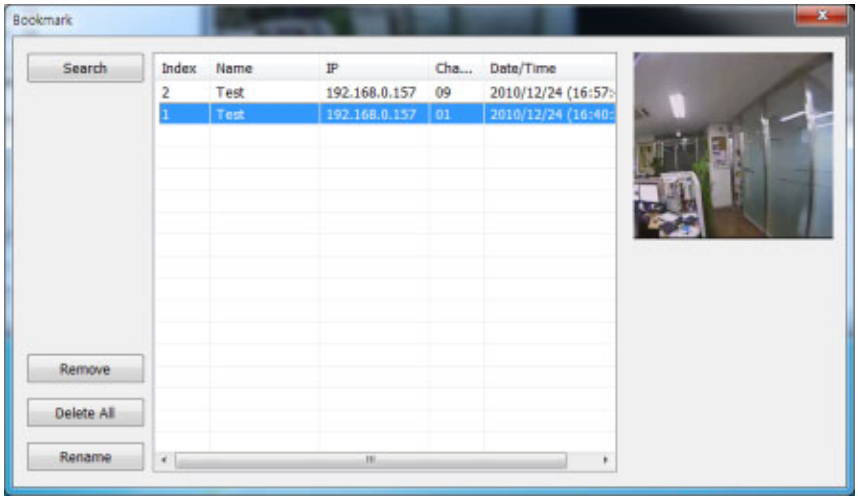
No	Item	Description
1	Date	Use the Calendar to select a desired date.
2	Time Interval	Select the Interval (time interval) which displays still shots by a specified time. You may choose 1min, 3min, 5min, 10min, 30min, and 1hour (ex. 1min. means 1 still shot per 1 minute of recorded video data.)
3	Image Size	Adjust the Thumbnail Image size by using the slide bar. Moving the slide bar to the right will increase the image size, and moving it to the left will decrease image size.
4	Time Range	Select the Time range (start time and end time) by using the slide bar.
5	Thumbnail images	Thumbnail images will be shown.
6	Search	Search button.

If you click each thumbnail image, you can search the selected data directly.

6.5.7 BOOKMARK

Click icon to bookmark the selected one channel search data.

Once the selected search data is bookmarked, the bookmark data is listed with an image in the bookmark list as shown below.



Select a bookmark list and click search or double click the bookmark list to search the bookmarked data.

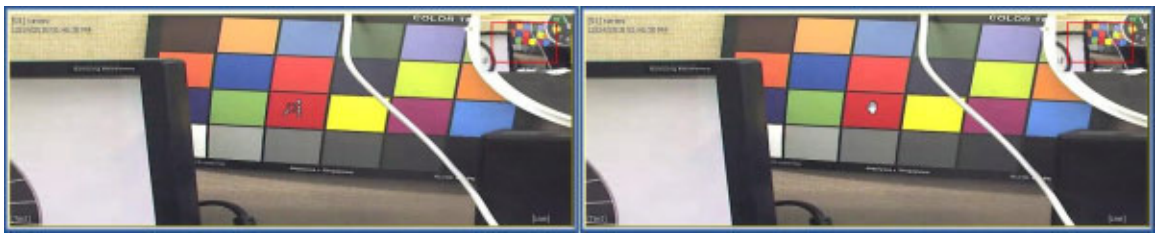
Click **REMOVE** button to remove a selected bookmark list and click **DELETE ALL** to delete all of bookmark list.

Click **RENAME** to rename the selected bookmark list.

6.5.8 DIGITAL ZOOM IN/OUT

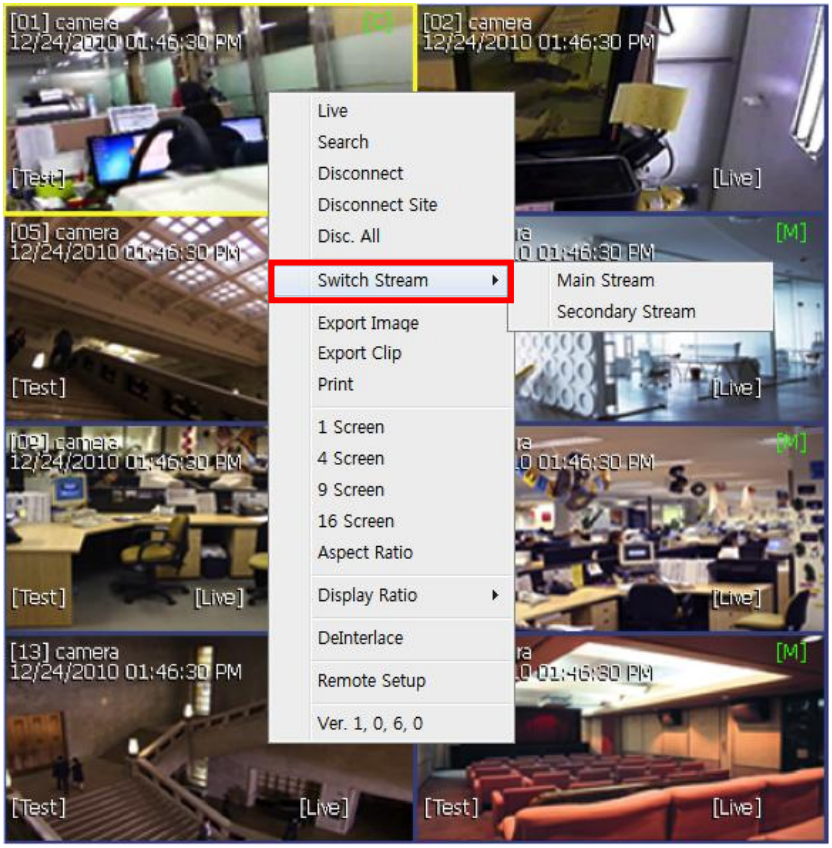
In Live/Search mode, digital zoom can be activated in a single full screen mode by using a mouse wheel.

Scroll up the mouse wheel, and then you can zoom in. Scroll down the mouse wheel, and then you can zoom out the selected channel.



6.5.9 Switch Stream

You can switch the Main stream to Secondary stream or vise versa on the site of a selected channel.

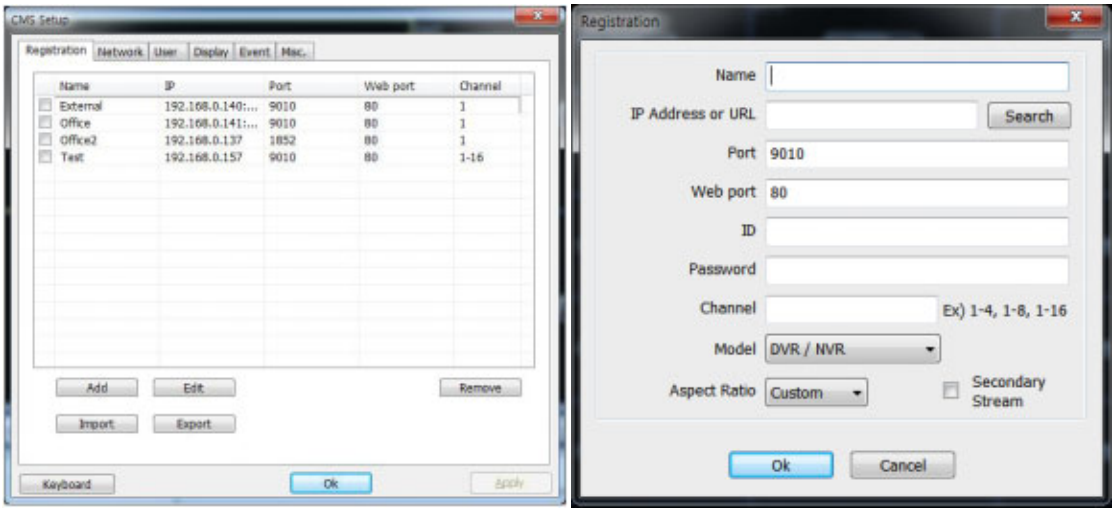


6.6 CMS SETUP

There are options for DEVICE Registration, Network, User, Display, Event and Misc.

6.6.1 NVR REGISTRATION

Add, Edit, Import, Export or Remove DEVICE site information.



Ex) Adding a new device site

In order to add a NVR, click 'Add' button, and put right information.

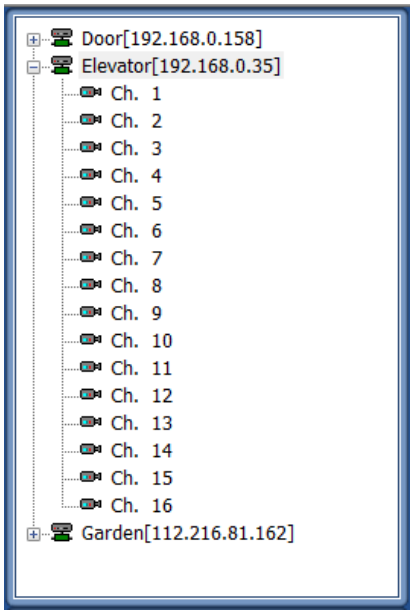
NVR can be detected by 'Search' button. Then the IP information will be received automatically.

No	Item	Description
1	Name	The name of the site.
2	IP	IP Address.
3	Search	Search the DEVICE sites in the same local network. (UPnP function)
4	Port	Port of the site. (Default: 9010)
5	Web port	Web Port of the site. (Default: 80)
6	ID	User ID of the site.
7	Password	Password of the site.
8	Channel	Number of channel of the site. (for example: 16ch DEVICE: 1-16 or specifically: 1,3,5,7,9)
9	Model	Select a DEVICE or DEVICE's model name.
10	Aspect Ratio	Select the displayed Aspect Ratio. (Custom, 1:1, 4:3, 16:9)
11	Secondary Stream	Connect to the Secondary stream of NVR

To edit and/ or remove DEVICE information, click ADD or REMOVE to amend DEVICE site information.

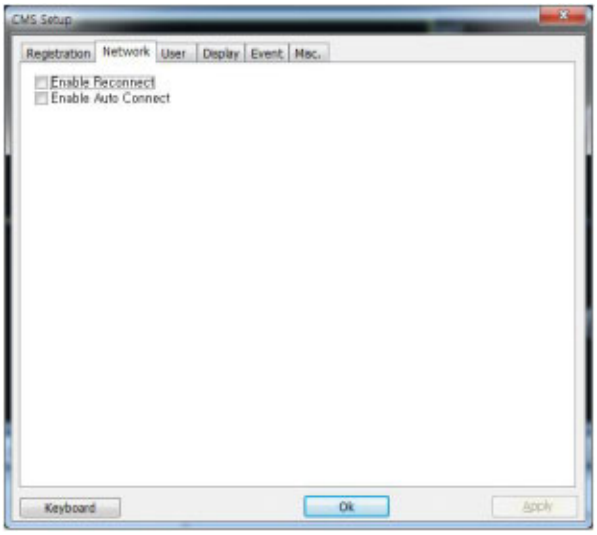
Able to export the current site list and save as a file or import the file to the site list.

Once the new DEVICE site is added, the new DEVICE information will be displayed at DEVICE site panel as shown below.



6.6.2 NETWORK

Able to setup RECONNECT and AUTO CONNECT in this tab.

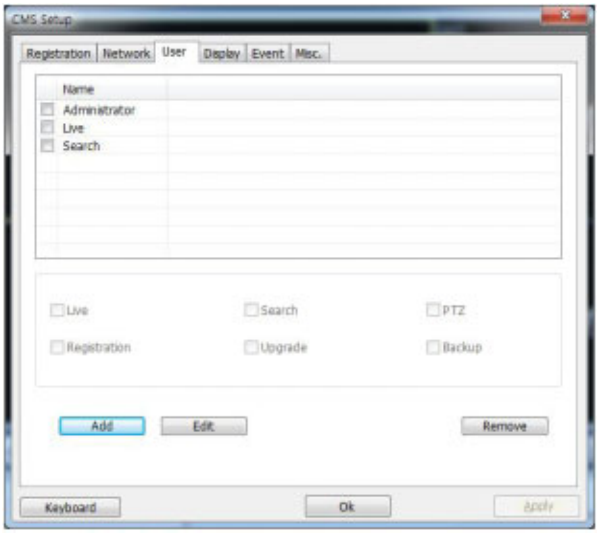


Enable Reconnect: When the network is unstable or disconnected, it will try to reconnect periodically. When the network gets stable again, it's reconnected.

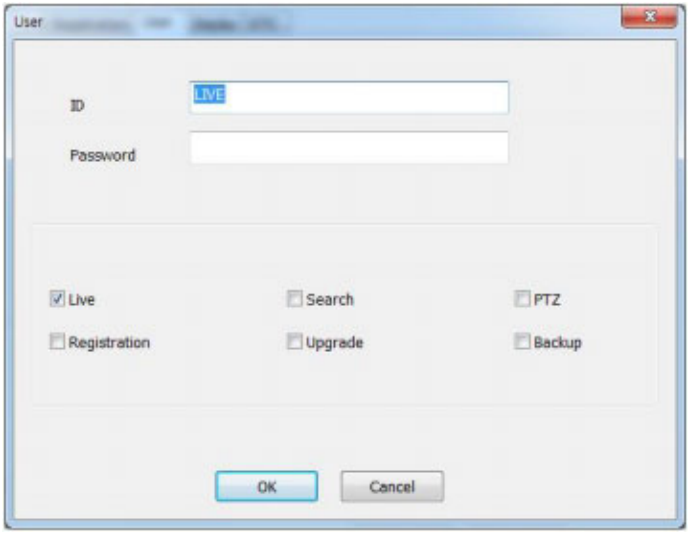
Enable Auto Connect: When you restart the CMS program again, after CMS is closed, it will reconnect to the sites just as before.

6.6.3 USER

User authority can be changed by Administrator. “admin” is the built-in account for administrating the DEVICE and CMS program.



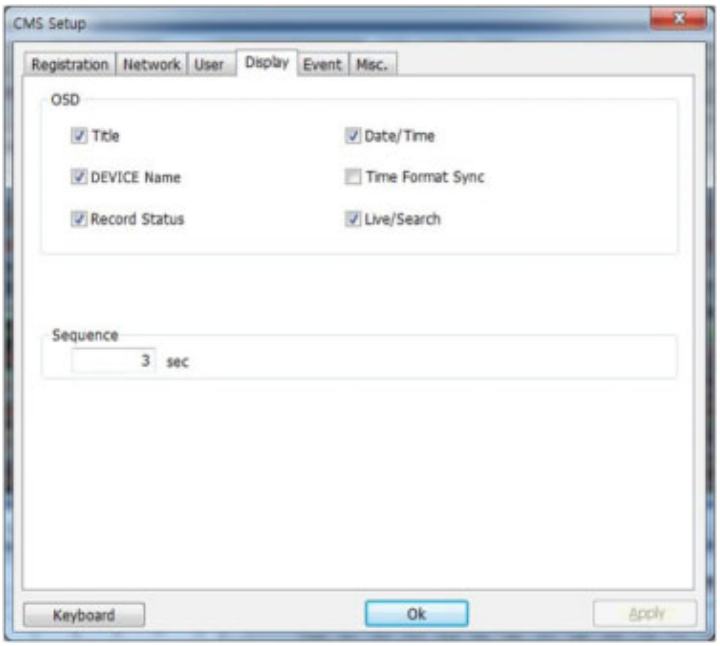
Ex) User authority change



User authority can be changed by Administrator. ID cannot be changed but should be removed.

6.6.4 DISPLAY

Options for OSD setting.



Title: Able to turn on/off the DEVICE title with the channel number.

Date/Time: Able to turn on/off the Date/Time of the site.

DEVICE Name: Able to turn on/off the name of the site.

Time Format Sync: Synchronize the DEVICE time format to CMS.

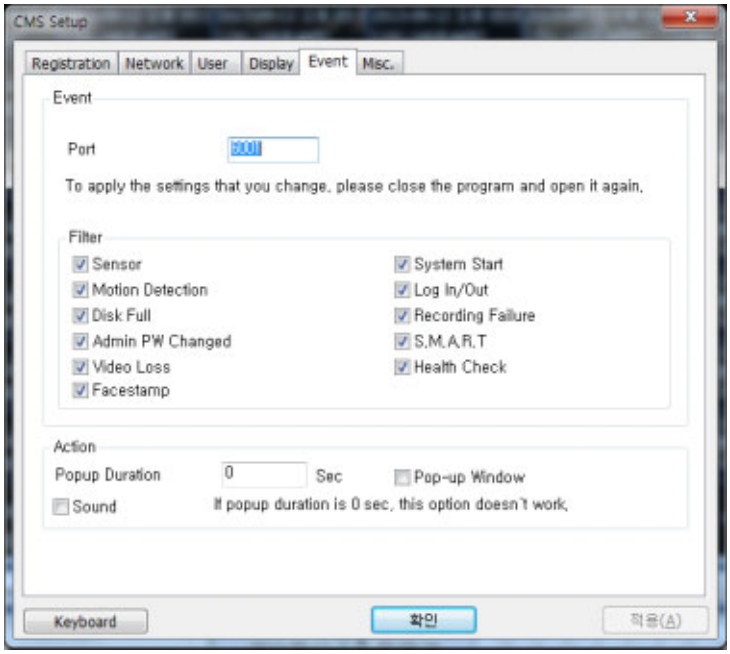
Record Status: Able to turn on/off the Record Status of the site.

Live/Search: Able to turn on/off the Live/Search of the site.

Sequence: Able to set Sequence interval.

6.6.5 EVENT

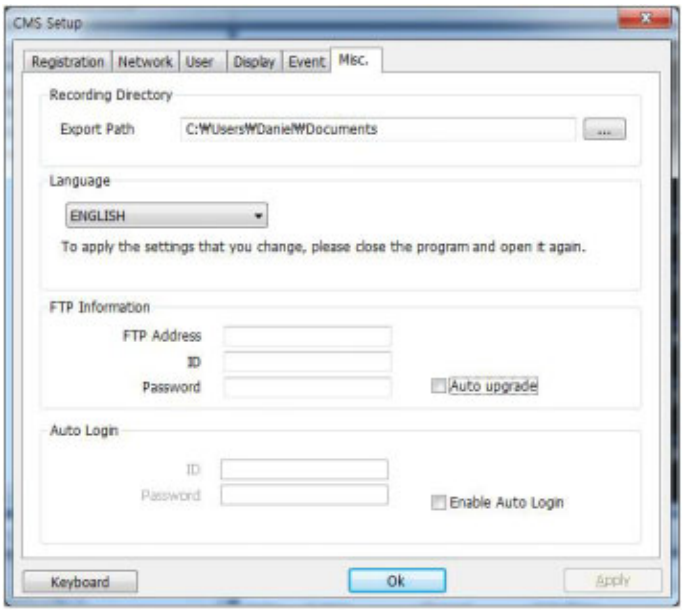
Setup the event port, event type and popup settings for event.



No	Item	Description
1	Port	Input the same event port number of DEVICE setting to receive event notification from the DEVICE.
2	Filter	Select the type of event to receive.
3	Action	Setup the popup duration and enable beep sound.

6.6.6 MISC.

Setup the Recording Directory, Language, Auto Upgrade, and Auto Login.



No	Item	Description
1	Recording Directory	Decide the recording directory to save images and moving images.
2	Language	Select a desired language.
3	FTP Information	In order to have Auto Upgrade, input FTP information. Once the FTP setup is done, CMS will detect the latest firmware is in the FTP and start upgrading automatically.
4	Auto Login	If you enable the auto login after inputting ID and Password, next time when you login, you don't need to type in the ID and Password again.

Chapter 3

MAC ACS CLIENT SOFTWARE USER MANUAL

7 MAC ACS USER GUIDE

7.1 System Requirement

Recommended System Requirement

OS	Mac OS X 10.6(snow leopard)
CPU	Intel i5 CPU or upper
VGA	Recommended More than 256MB
RAM	Recommended More than 1GB
HDD	20MB Free Space

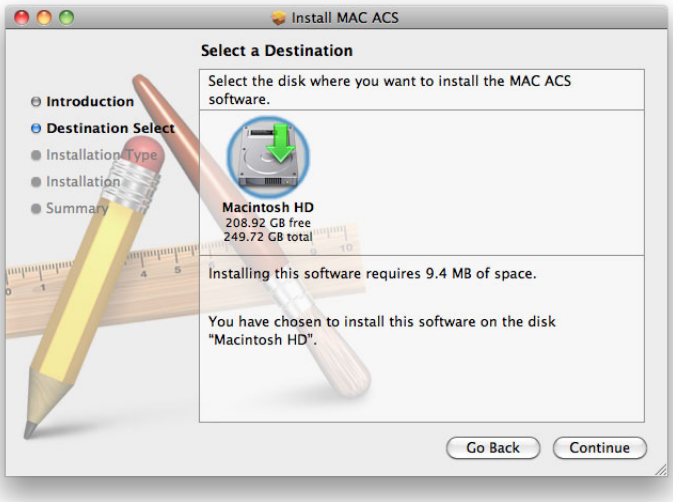
Minimum System Requirement.

OS	Mac OS X 10.5(Leopard)
CPU	Built-in Intel CPU MAC
VGA	128MB
RAM	512MB
HDD	20 MB Free space

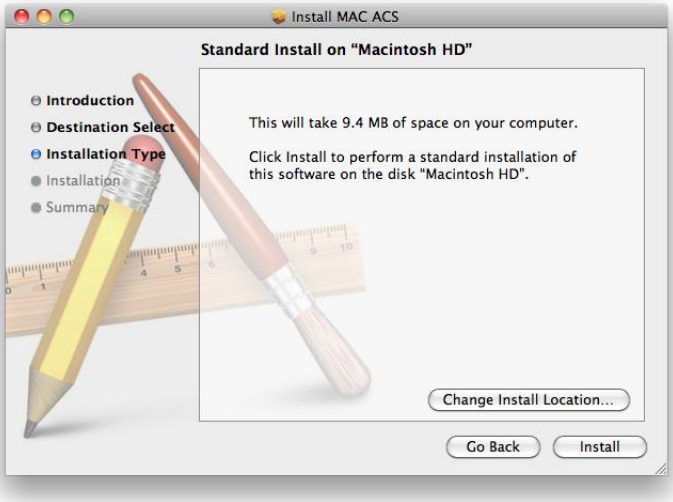
7.2 Install

a. Run MAC ACS.pkg on CD, and a Setup Menu appears as below.

b. Select the HDD to be installed. Press the [Continue] button to move to the next screen.

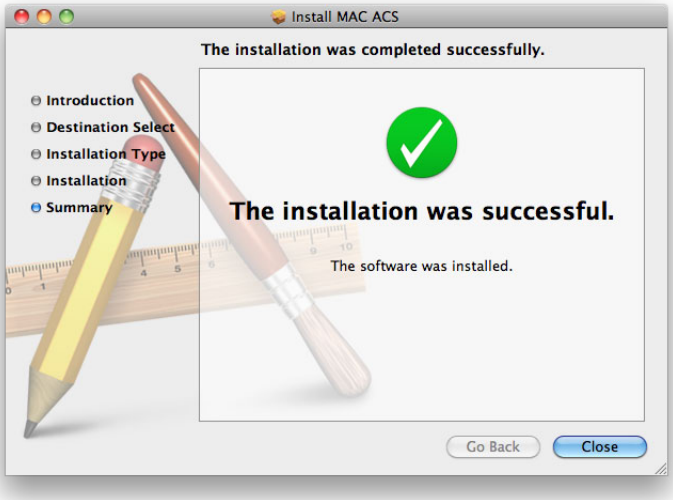


c. Press the [Continue] button to move to the next screen



d. Press the [Install] button to Install MAC ACS.

e. Put in the password and Click [OK] to begin installation. When the installation is complete, the message appears as below.

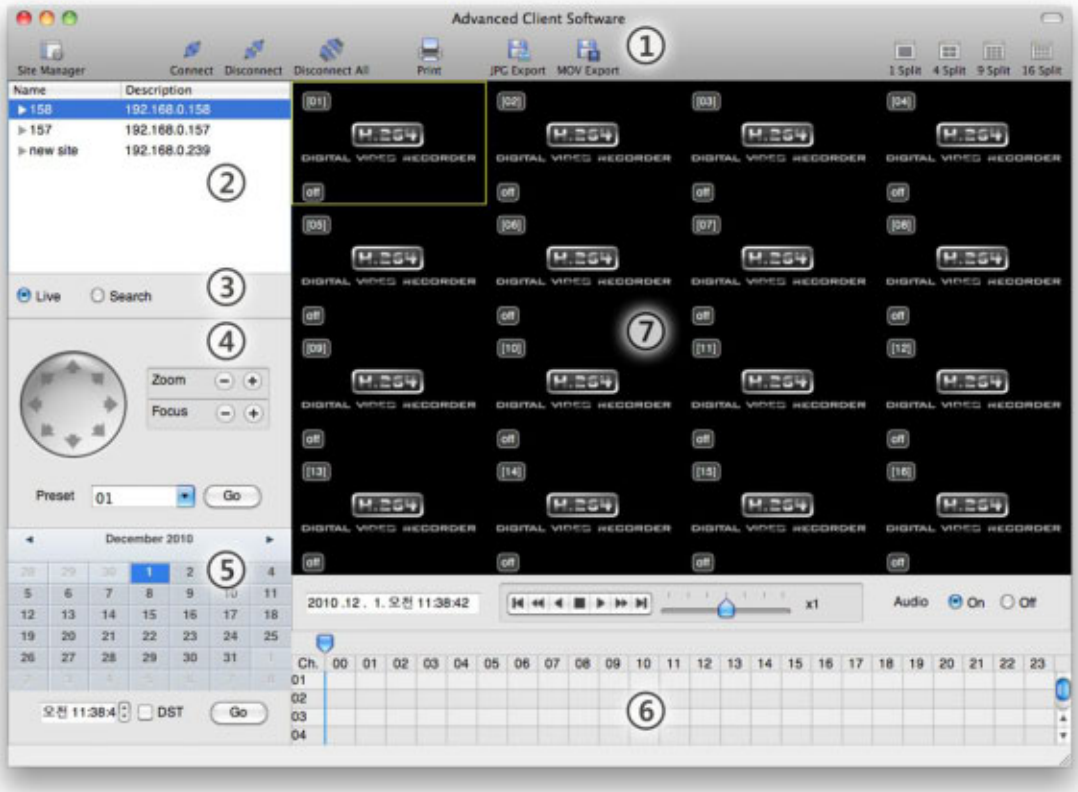


7.3 Basic Operation

Click on ACS icon on Application Folder

Macintosh HD
iDisk
SHARED
hansung-pc
home_net
kissad
nasimba
one2ten-pc
systemteam
PLACES
Desktop
one2ten
Applications
Documents
iPhoto
iSync
iTunes
iWeb
iWork '09
MAC ACS
Mail
NateOn
OpenOffice.org
Photo Booth
Preview
QuickTime Player
Safari
Stickies
System Preferences
TeamViewer

7.3.1 Screen Layout



No.	Item	Description
1	Main Toolbar	AVS Setting, Live and Search Connect, Disconnect, Image Save, Screen Mode and Change
2	NVR List Panel	Registered NVR Site List. Possible to connect by Dragging
3	Live or Search Connect Panel	Click Live or Search mode to connect the panel
4	PTZ Panel	PTZ camera control is not available.
5	Calendar Panel	Search by Time and Date
6	Search Panel	Recorded information is shown in search mode. Control the speed of Playback and Audio as well
7	Display Panel	Transmitted Camera images are shown(Live and Playback)

7.3.2 Main Toolbar

No.	Button	Description
1	Site Manager	Register or Delete NVR on the list
2	Connect	Connect to a site that is listed on the NVR list panel (Select Live and Search mode at Connect Mode Panel)
3	Disconnect	Disconnect a selected channel
4	Disconnect All	Disconnect All Channels
5	Print	Print out still image
6	JPG Export	Save a selected image to the desktop as JPEG format
7	Movie Export	Save a selected video clip to the desktop as mov format
8	Split	Single Channel, 4-Split, 9-Split, 16-Split

7.3.3 Site List Panel

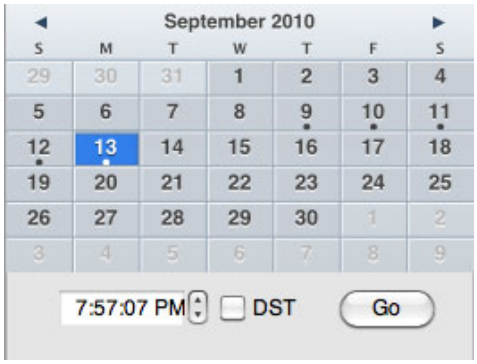
The site list panel shows registered NVR lists. To connect, Drag & Drop the site.

Before you connect the site, Select the Live or Search mode first in the connection mode panel.

16 different On-Screen NVR, a mixture of different connection modes can be monitored.

7.3.4 Calendar Panel

Activated in Search Mode



The recorded data will be shown in blue bold with the dot which is located below the number

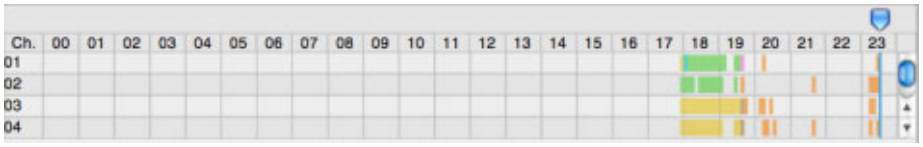
When you click the recorded date on the search mode, the playback time will be detected automatically

(Go Button) should be pressed to start playback from the selected date and time

If DST is enabled, the earlier one-hour overlapped video will be shown first.

7.3.5 Search Panel

Activated in Search Mode



- The Search panel shows the record information for each channel.

- Each record mode is like below.

No Record	Background Color
Continuous (Yellow Color)	
Instant(Red Color)	
Alarm(Orange Color)	
Motion(Green Color)	

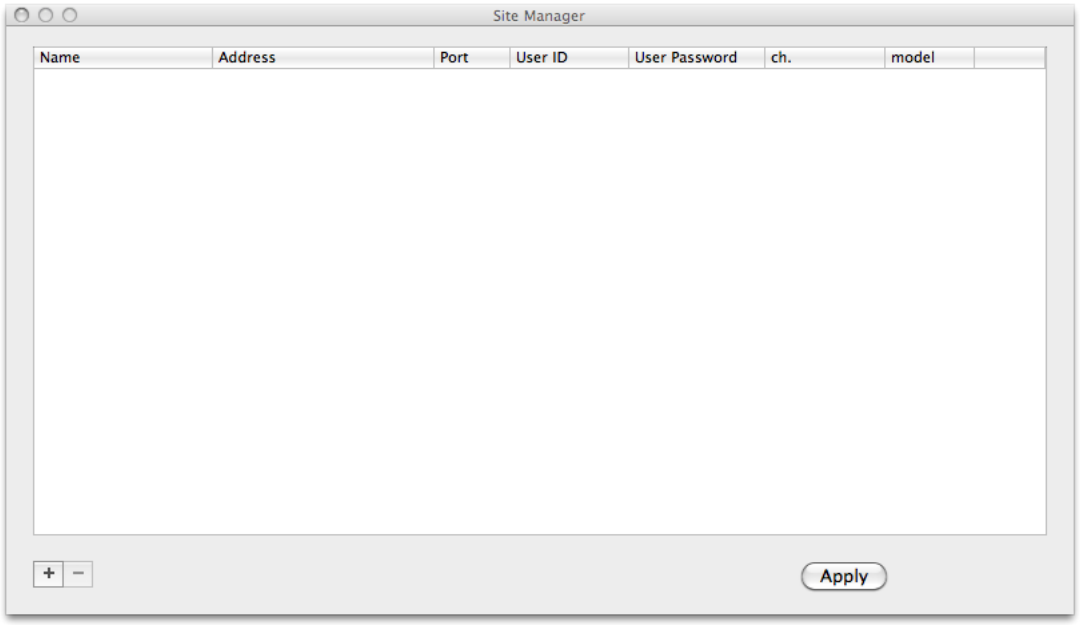
- Click the time or move the time bar to the time you want to playback in the search panel.

- Playback control panel

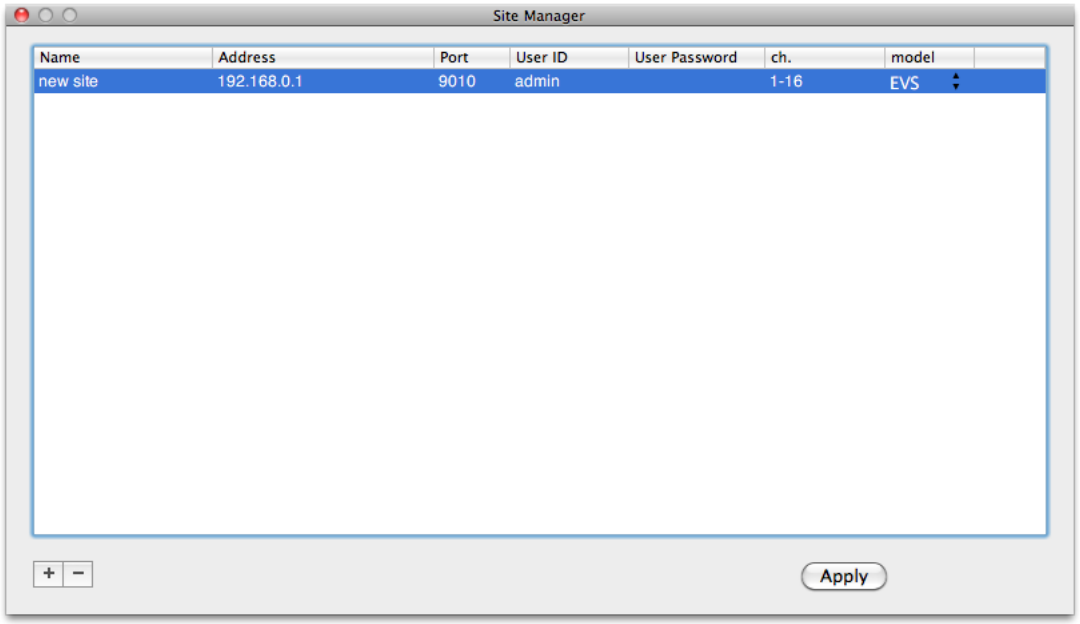
No	Button	Description
1		Go to first
2		Forward Playback : Decrease the Speed / Reverse Playback : Increase the Speed
3		Reverse Playback
4		Pause
5		Forward Playback
6		Forward Playback : Increase the speed / Reverse Playback : Decrease the speed
7		Go 10 seconds before the end of the data.

7.3.6 Site Manager

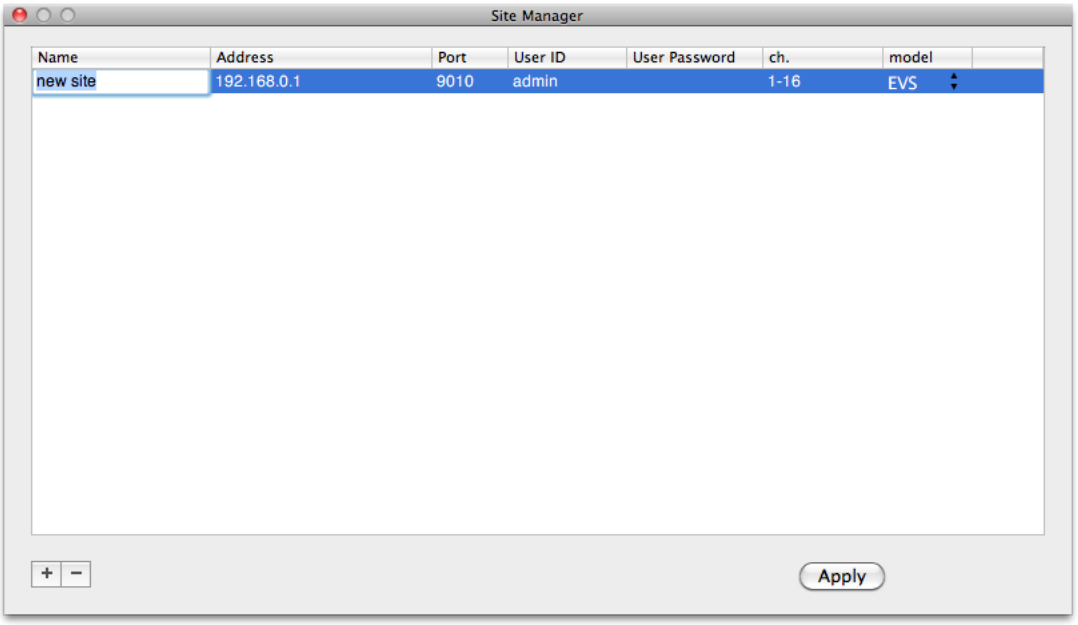
Add or Modify or Remove NVR site information.

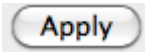


Press to register the NVR as follows : The default value is registered



To fix, Double-Click on the item. For example, Double-click " New Site " to change the name.

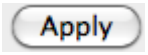


After modifications have been made, press 

No.	Function	Description
1	Name	Fill in the name of the site to be registered
2	IP	Fill in the IP of the site to be registered
3	Port	Fill in the PORT No of the site to be registered (Default 9010)
4	User ID	Fill in the ID of the NVR to be connected
5	User Password	Fill in the PW of the NVR to be connected
6	Ch.	Fill in channel of the site to be registered (ex, 16 Ch NVR: 1-16 or Registered by Camera : 1,3,5,7,9)
7	Model	Select Model name of the NVR to be registered

Please double click the items, if you want to change the item from the registered information.

If you want to delete the registered NVR information, Select the NVR and click

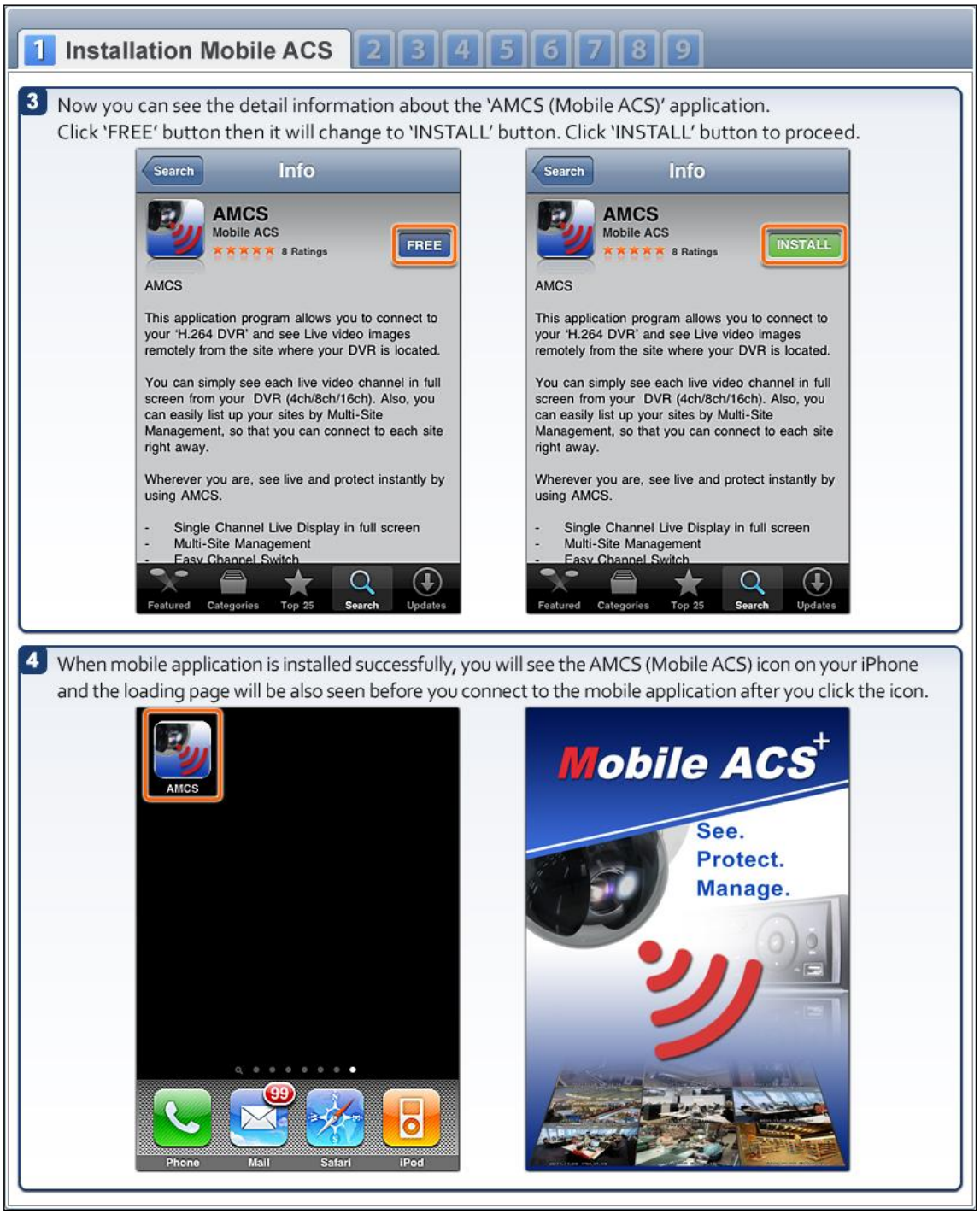
After modifications have been made, press 

Chapter 4

MOBILE PHONE SOFTWARE USER MANUAL

8 MOBILE PHONE SOFTWARE USER GUIDE

8.1 iPhone application software


1 Installation Mobile ACS
2 3 4 5 6 7 8 9
3 Now you can see the detail information about the 'AMCS (Mobile ACS)' application.
Click 'FREE' button then it will change to 'INSTALL' button. Click 'INSTALL' button to proceed.
Search
Info
AMCS
Mobile ACS
8 Ratings
FREE
AMCS
This application program allows you to connect to your 'H.264 DVR' and see Live video images remotely from the site where your DVR is located.
You can simply see each live video channel in full screen from your DVR (4ch/8ch/16ch). Also, you can easily list up your sites by Multi-Site Management, so that you can connect to each site right away.
Wherever you are, see live and protect instantly by using AMCS.
- Single Channel Live Display in full screen
- Multi-Site Management
- Easy Channel Switch
Featured
Categories
Top 25
Search
Updates
Search
Info
AMCS
Mobile ACS
8 Ratings
INSTALL
AMCS
This application program allows you to connect to your 'H.264 DVR' and see Live video images remotely from the site where your DVR is located.
You can simply see each live video channel in full screen from your DVR (4ch/8ch/16ch). Also, you can easily list up your sites by Multi-Site Management, so that you can connect to each site right away.
Wherever you are, see live and protect instantly by using AMCS.
- Single Channel Live Display in full screen
- Multi-Site Management
- Easy Channel Switch
Featured
Categories
Top 25
Search
Updates
4 When mobile application is installed successfully, you will see the AMCS (Mobile ACS) icon on your iPhone and the loading page will be also seen before you connect to the mobile application after you click the icon.
AMCS
99
Phone
Mail
Safari
iPod
Mobile ACS+
See.
Protect.
Manage.

1 2 How to connect and setup 3 4 5 6 7 8 9
1 Press "+" button to add desired device.
AT&T 11:02 AM
+
Device List
Edit
DVR.1
NVR.1
DVR.2
NVR.2
Camera.1
Live
Search
Setup
Help
2 Fill in the new site information correctly and press "Save" button to save. For the model option, please choose "NVR".
AT&T 11:02 AM
Device List
Add Device
Save
Name
Test
Ch.
1-16
Address
112.216.8.1
TCP Port
2000
Web Port
80
User ID
Admin
Password
Model
NVR
AT&T 11:02 AM
Device List
Add Device
Save
User ID
Admin
Password
Model
NVR
Cancel
Done
Advanced(480/400fps Series)
IP Camera
NVR

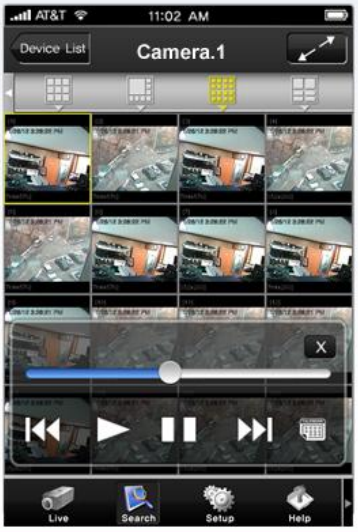
1 2 **3 How to connect and view** 4 5 6 7 8 9

1 At first, select the desired device.
To see live view, press the live icon on the bottom of the screen.

2 User will have live screen view and can also select the desire layout.

1 2 3 **4 How to search** 5 6 7 8 9

1 Select Search icon after connecting the target device or press Search icon in live screen.
Up to 16 channels can be searched simultaneously. Time and date search is available by pressing calendar in control box and user can adjust it.



1 2 3 4 **5 Drag and Switch Function / Layout** 6 7 8 9

1 Drag / Switch Function : User can use Drag / Switch function to switch the screens.
User can see bigger picture of desired camera view.

2 Layout Function : User can select the desire layout.

1 2 3 4 5 **6 How to control PTZ control** 7 8 9

1 A single channel PTZ is simply controlled by using touch screen. First, PTZ control is available when selected channel is set for PTZ camera and PTZ control is available in full screen mode. PTZ camera can be moved into desired position by pressing directional arrow icons. Zoom In and Out can be controlled by + icon and – icon in center. In order to move the PTZ camera into desired position by Preset, user can selected pre-saved preset no in Preset Tab menu.

Pan/Tilt

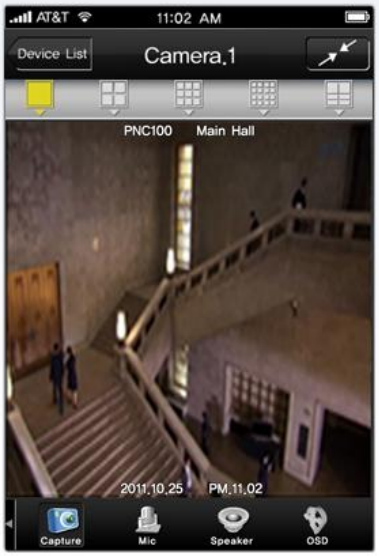
Zoom In/Zoom Out

Preset

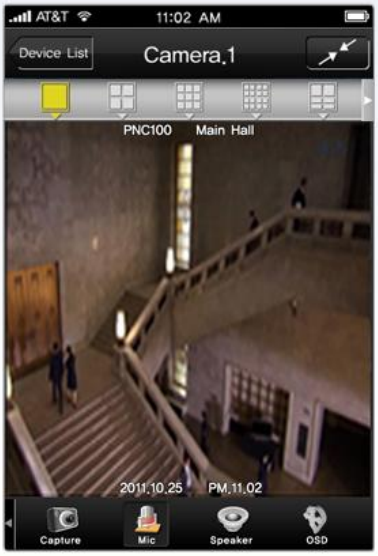
- PTZ camera control is not available on the NVR system.

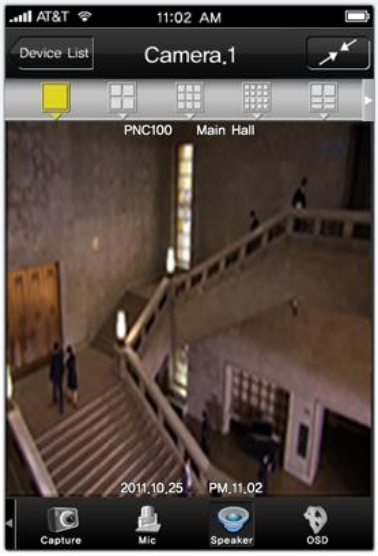
1 2 3 4 5 6 **7 Capture / 2 way audio function** 8 9

1 User can use Capture function by pressing Capture icon on the bottom of the screen.



2 By using mobile application, 2 way audio is available. On the bottom of the screen, there are Mic and Speaker icons.

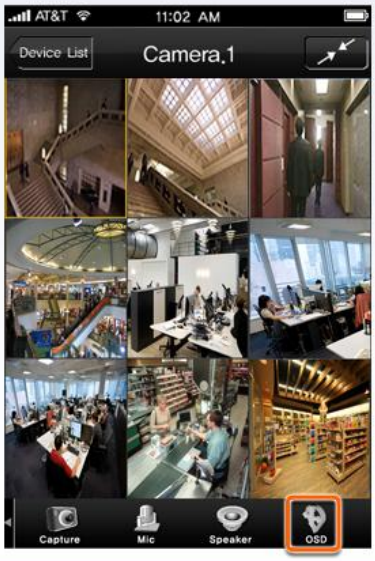


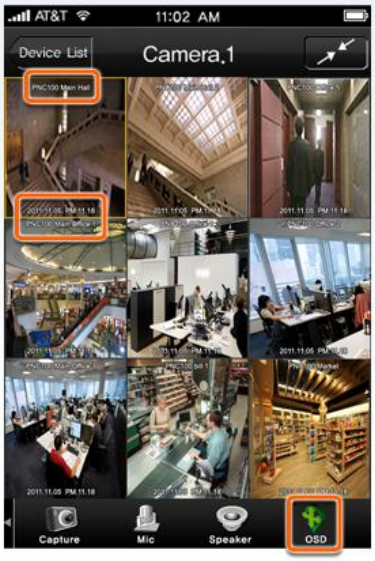


1 2 3 4 5 6 7 **8 Setup / Display Camera Information** 9

1 User can setup on the "Remote Setup" page. When you are done setting, press "Done" button.

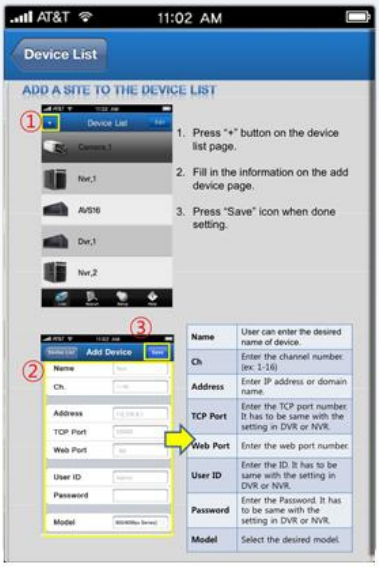
2 Display Camera information : Camera name, Place, Date and Time.



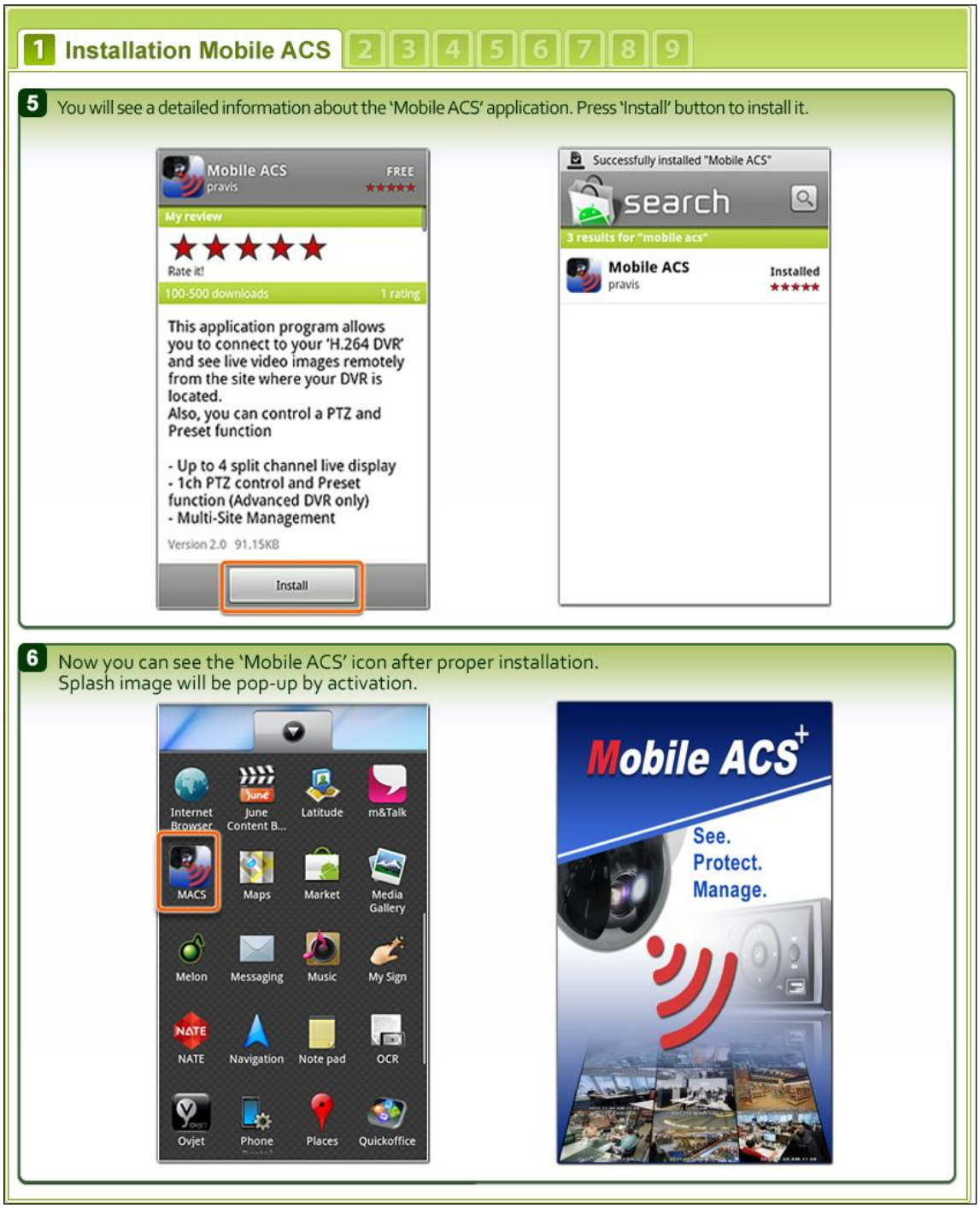


1 2 3 4 5 6 7 8 9 Help

1 Help menu can be selected in bottom incon menu.


AT&T
11:02 AM
Device List
ADD A SITE TO THE DEVICE LIST
1. Press "+" button on the device list page.
2. Fill in the information on the add device page.
3. Press "Save" icon when done setting.
Add Device
Name
Ch
Address
TCP Port
Web Port
User ID
Password
Model
User can enter the desired name of device.
Enter the channel number. (ex: 1-16)
Enter IP address or domain name.
Enter the TCP port number. It has to be same with the setting in DVR or NVR.
Enter the web port number.
Enter the ID. It has to be same with the setting in DVR or NVR.
Enter the Password. It has to be same with the setting in DVR or NVR.
Select the desired model.

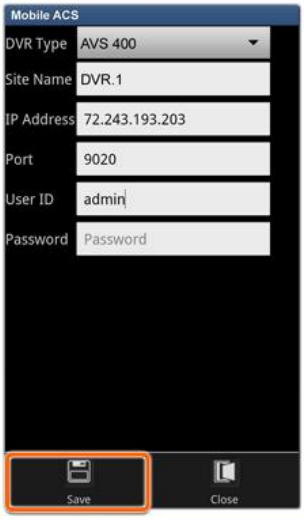
8.2 Android application software

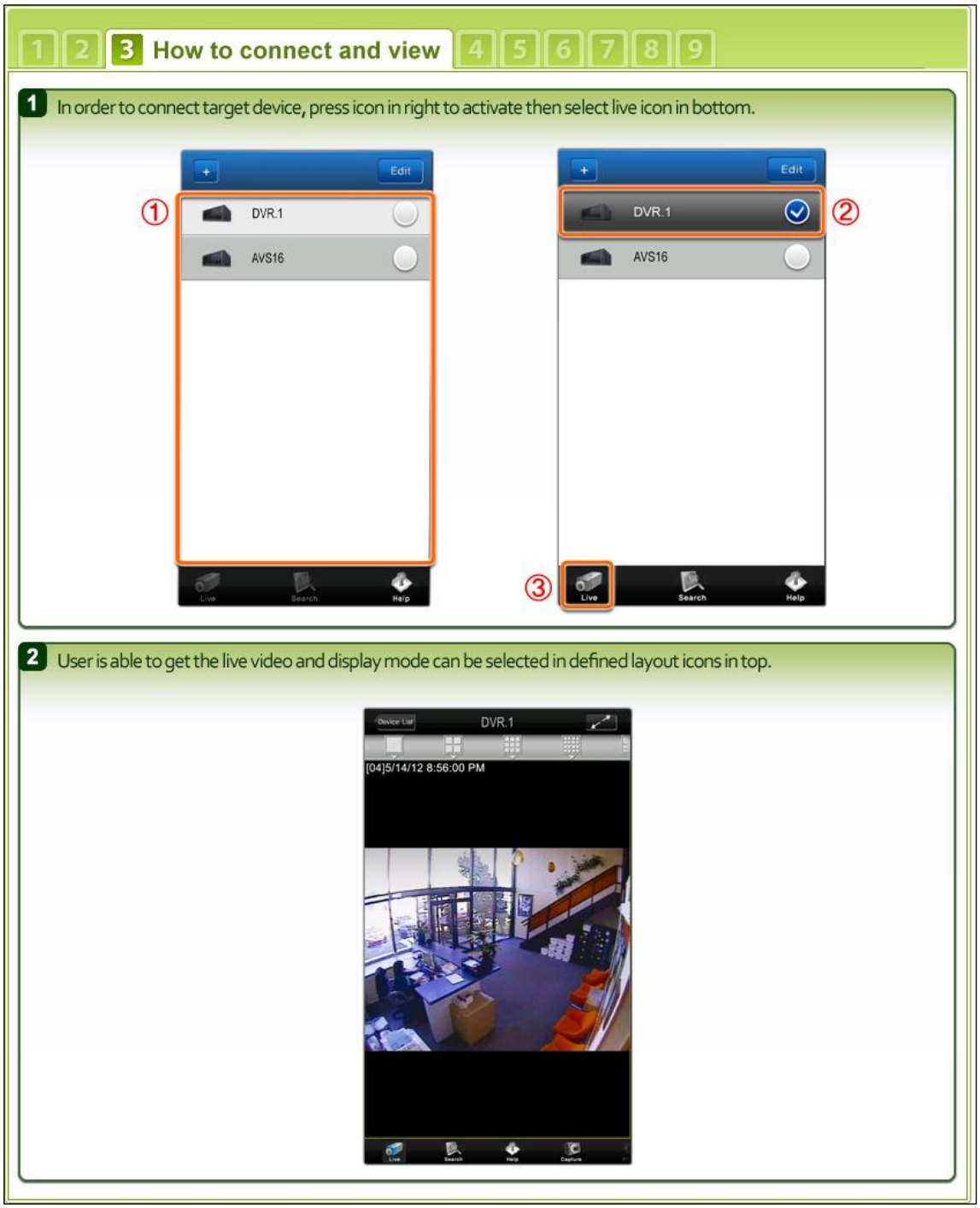

1 Installation Mobile ACS
2 3 4 5 6 7 8 9
5 You will see a detailed information about the 'Mobile ACS' application. Press 'Install' button to install it.
Mobile ACS
pravis
FREE
My review
Rate it!
100-500 downloads
1 rating
This application program allows you to connect to your 'H.264 DVR' and see live video images remotely from the site where your DVR is located.
Also, you can control a PTZ and Preset function
- Up to 4 split channel live display
- 1ch PTZ control and Preset function (Advanced DVR only)
- Multi-Site Management
Version 2.0 91.15KB
Install
Successfully installed "Mobile ACS"
search
3 results for "mobile acs"
Mobile ACS
pravis
Installed
6 Now you can see the 'Mobile ACS' icon after proper installation.
Splash image will be pop-up by activation.
Internet Browser
June Content B...
Latitude
m&Talk
MACS
Maps
Market
Media Gallery
Melon
Messaging
Music
My Sign
NATE
Navigation
Note pad
OCR
Ovjet
Phone
Places
Quickoffice
Mobile ACS+
See.
Protect.
Manage.

1 2 How to connect and setup 3 4 5 6 7 8 9

1 Press "+" button to add desired device then set-up menu will be pop-up automatically.

2 Fill in the new site information correctly and press "Save" button to save after selecting correct device.




1 2 3 How to connect and view 4 5 6 7 8 9
1 In order to connect target device, press icon in right to activate then select live icon in bottom.
Edit
DVR.1
AVS16
Live
Search
Help
①
②
③
2 User is able to get the live video and display mode can be selected in defined layout icons in top.
Device List
DVR.1
[04]5/14/12 8:56:00 PM

1 2 3 **4 How to search** 5 6 7 8 9

1 Select Search icon after connecting the target device or press Search icon in live screen. Up to 16 channels can be searched simultaneously. Time and date search is available by pressing calendar in control box and user can adjust it.

1 2 3 4 **5 Drag and switch Function / Layout** 6 7 8 9

1 Drag / Switch : User can switching video position. Please drag the selected channel then drop it into desired window to switch.

2 Display Layout : Various display layout can be selected in icons in top.

1 2 3 4 5 **6 How to control PTZ control** 7 8 9

1 A single channel PTZ is simply controlled by using touch screen. First, PTZ control is available when selected channel is set for PTZ camera and PTZ control is available in full screen mode. PTZ camera can be moved into desired position by pressing directional arrow icons. Zoom In and Out can be controlled by "+" icon and "-" icon in center. In order to move the PTZ camera into desired position by Preset, user can selected pre-saved preset no in Preset Tab menu.

Pan/Tilt

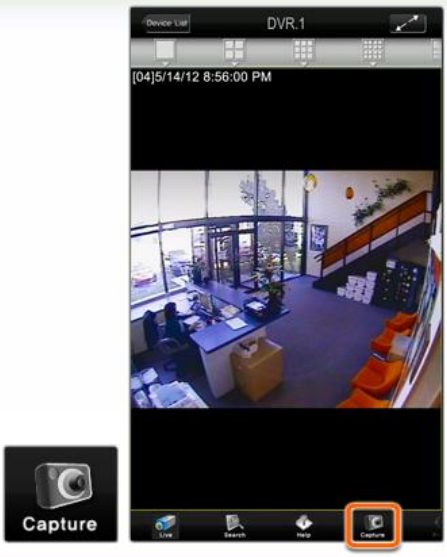
Zoom In/Zoom Out

Preset

- PTZ camera control is not available on the NVR system.

1 2 3 4 5 6 **7 Capture / 2 way audio function** 8 9

1 Snap shot can be captured through capture icon in bottom menu.



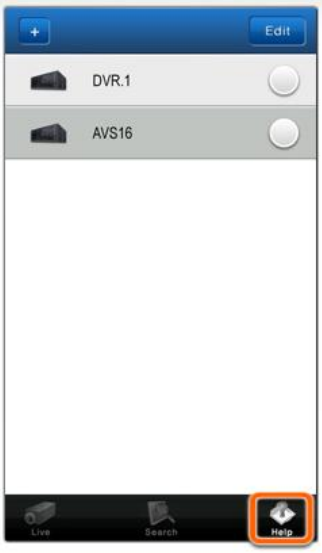
2 2 way audio can be on/off by selecting speaker or microphone icon in bottom menu.

1 2 3 4 5 6 7 **8 Display Camera Information** 9

1 OSD can be on / off and it displays camera title & time & date information.

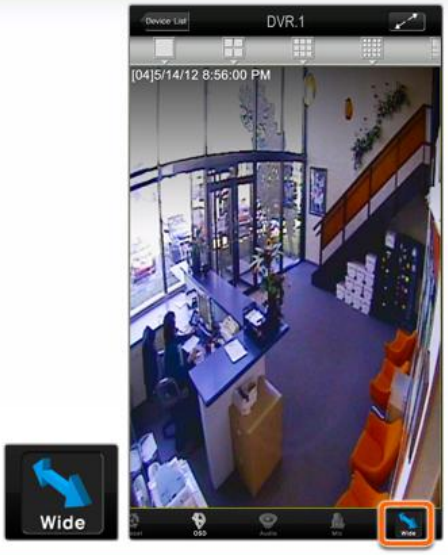
1 2 3 4 5 6 7 8 **9 Help**

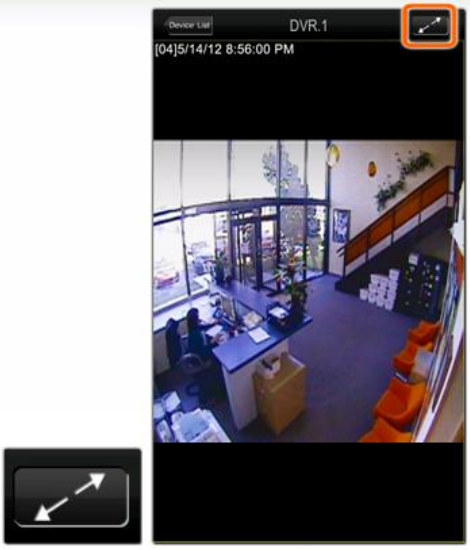
1 Help menu can be selected in bottom incon menu.



Mobile ACS
4. Click on the options button in your smart phone or tablet and click on 'Save' to add the new device to your Device list, or 'Close' to cancel all changes.
How to edit a site:
1. Make sure you are in the 'Device List' page.
2. Press the 'Edit' button on the top right corner of the Device List window.
3. All devices on your list will be open to delete or edit their information.

2 Custom Fit(Strech the video to fit for window) / Full Screen Mode.





8.3 Using WAP+3G Connection

1 In case of using WAP, 3G Connection

1 First, you need to check out 'WEB PORT' of your DVR, because WAP Base Connection method is mainly based on the Mobile Web Service through the 'WEB PORT'. [Default setting is 80]

2 Type your connection URL in the Internet Browser in your Blackberry.
The URL type should be one of the following two URL types.

http://Your_IP_Information/mobile/ [OR] http://Your_IP_Information/mobile/index.html

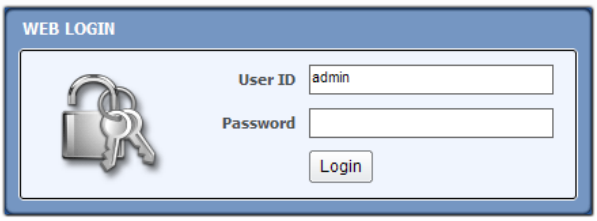
i.e) http://72.243.193.204/mobile/ [OR] http://72.243.193.204/mobile/index.html

Note:
- You may need to input 'index.html' at the end of your URL depending on your Web Browser Property. Therefore, please try both URL types.

3 If the 'WEB PORT' of your DVR is not '80', but other port number, for example, '8088', then you need to type '8088' at the end of the URL.

i.e) http://72.243.193.204:8088/mobile/ [OR] http://72.243.193.204:8088/mobile/index.html

4 When the connection is successful, you can see the below windows.
Please type in User ID and Password. The default setting is admin(User ID) and No password like below.



1 In case of using WAP, 3G Connection

Note:

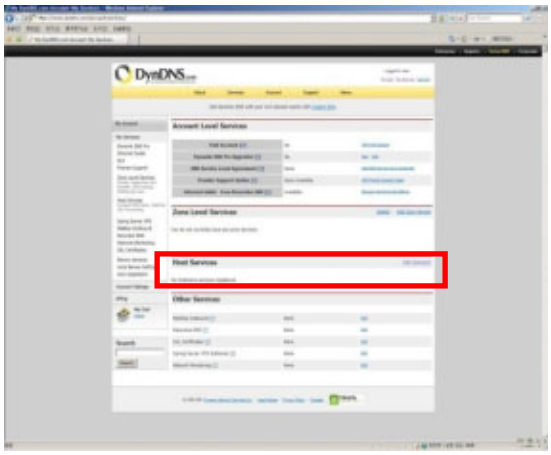
- When connection established successfully, the JPEG image will be refreshing 1 image per about 5 seconds automatically.

9 APPENDIX : DYNDNS SITE REGISTRATION

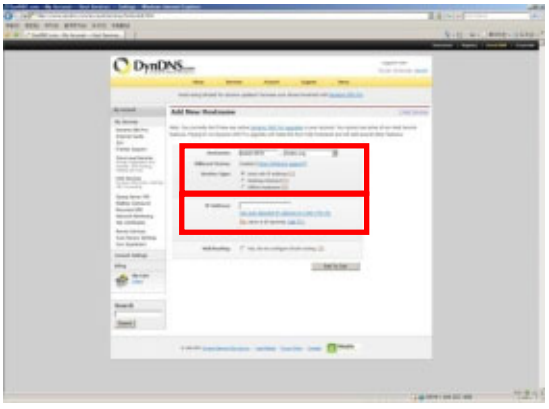
1) Go to www.dyndns.com

2) Log in to the Site after registration

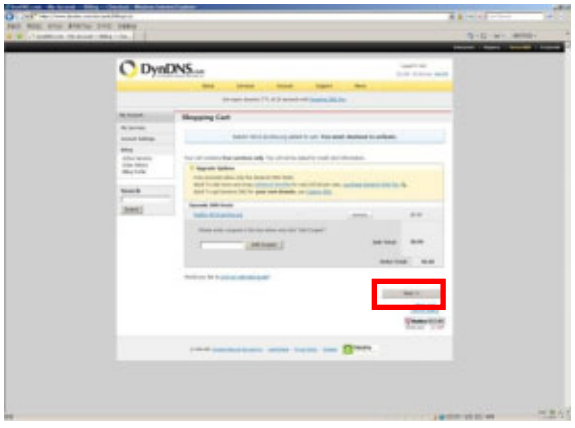
3) Click " Add Hostname" button on "Host Services"



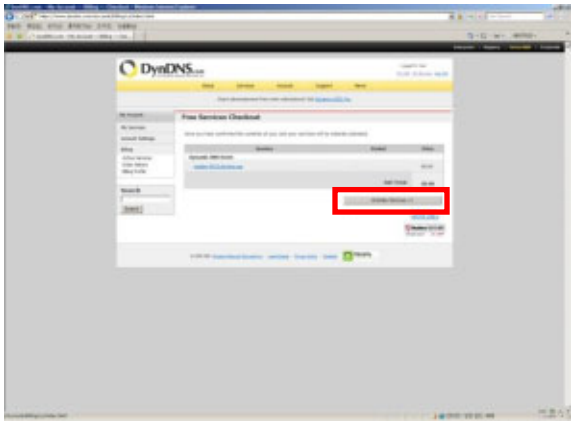
4) Put in the IP address and Host name on the blank



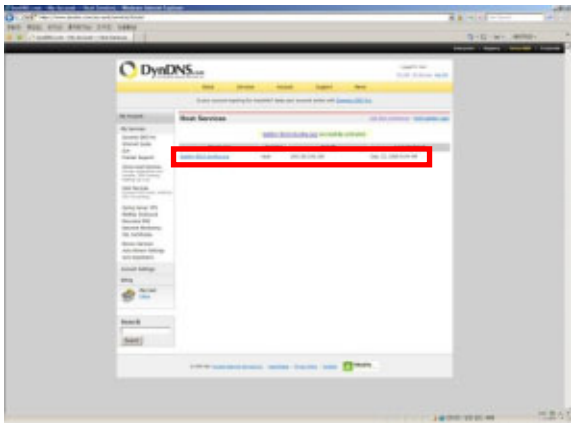
5) Click "NEXT" Button



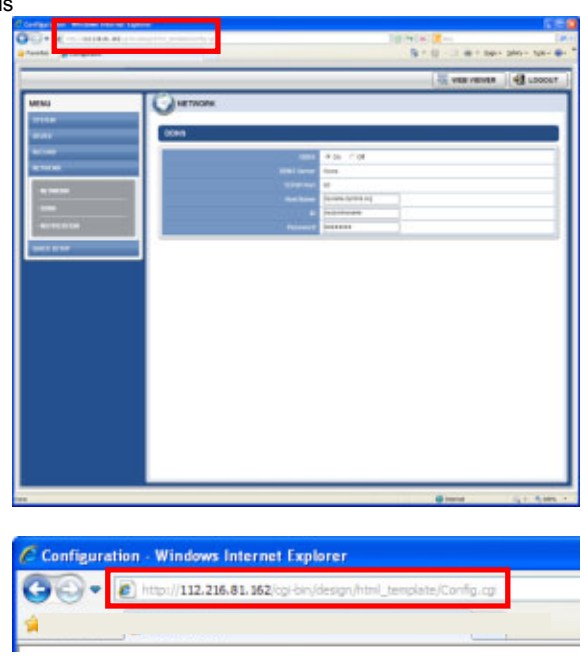
6) Click "Activate Services" button


DynDNS

7) Confirm the domain name and IP address



8) Check the connection status



- **Tip**

1. It may take a little time to be completely done for DNS deployment after changed sub domain.
2. Please recheck NVR's IP address registered in the My Service Menu, if you can't access NVR using dyndns.
3. If you are using dyndns to change the IP address for the NVR to the update request, dyndns update by the circumstances that may be late.
4. Dyndns domain is registered by the policy. If the update occurs frequently, it may be blocking.
   Please recheck NVR's service status registered in the My Service Menu, if you don't access dyndns.
5. If you don't access dyndns for a long time, domain will be deleted automatically.
   To prevent this, please access it regularly, or you will have to pay for it again.
   For more information, please contact to dyndns directly

10 APPENDIX : SPECIFICATION

Full HD Network Video Recorder 4/8CH		
Design		
Compression	Video	H.264, JPEG supported
	Audio	ADPCM, PCM supported
HDD Interface		1EA x SATA I / II / III
Operation System		Embedded Linux
Video	Output	HDMI (1920x1080p/1280x720p/1280x1024/1024x768)
Live & Playback	Decoding	Max 120fps @ 1080P (30fps per CH)
	Display Mode	1/4 auto sequence, Main stream(Recording), Second stream(Mobile/WEB)
	Search Mode	Date/Time, Record Table, Calendar, Event, Bookmark,System log, Event log
Record	Main Stream	Max 120fps @ 1080P (30fps per CH)
	Second Stream	Real Time Recording available Up to WVGA
	Mode	Continuous, Event(Motion, Sensor), Pre-alarm, Post-alarm
Network	Interface	1x 10/100/1000Mbps WAN port, 4 x 10/100Mbps LAN port
	Protocol	TCP/IP, DHCP, NTP, HTTP, DDNS, RTP, RTSP, FTP, SMTP, OnViF, uPnP
Interface Option	USB	2 x USB 2.0
	PoE	4 ports (802.3 AF supported)
Mobile apps		iPhone, iPad, Android, Kindle fire
PTZ		Network Protocol
Audio In / Out		1 x Audio in, 1 x Audio out
Alarm		1/1
Power		12V / 3A, PoE: 48V / 1.4A
Accessories		Mouse
Operating Temperature		0^0C ~ 40^0C
Operating Humidity		0% ~ 90%
Support IP Camera		Onvif
Certification		CE, WEEE, RoHS
Dimension(W x H x D)		280 x 48 x 245mm

NOTE The specification is subject to change without any notice.